GENERAL VIEW

OF THE

AGRICULTURE

OF THE COUNTY OF

NORTHAMPTON,

WITH

OBSERVATIONS ON THE MEANS OF ITS IMPROVEMENT.

DRAWN UP FOR THE CONSIDERATION OF

The Board of Agriculture and Internal Improvement.

TO WHICH IS ADDED,

An APPENDIX, containing a Comparison between the ENGLISH and SCOTCH Systems of Husbandry, as practised in the Counties of Northampton and Perth.

BY JAMES DONALDSON,
DUNDEE.

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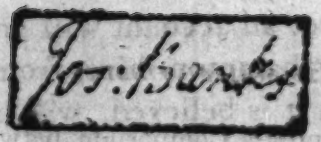
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THE following valuable communications, reſpecting the preſent ſtate of huſbandry in the county of Northampton, and the means of its improvement, drawn up for the conſideration of the Board of Agriculture, is now printed, merely for the purpoſe of its being circulated there, in order that every perſon, intereſted in the welfare of that county, may have it in his power to examine it fully before it is publiſhed. It is therefore requeſted, that any remark, or additional obſervation, which may occur to the reader, on the peruſal of the following ſheets, may be tranſmitted to the Board of Agriculture, at its office in London, by whom the ſame ſhall be properly attended to; and, when the returns are completed, an account will be drawn up of the ſtate of agriculture in Northampton-ſhire, from the information thus accumulated, which, it is believed, will be found greatly ſuperior to any thing of the kind ever yet made public.

The Board has followed the ſame plan, in regard to all the other counties in the united kingdom; and, it is hardly neceſſary to add, will be happy to give every aſſiſtance in its power, to any perſon who may be deſirous of improving his breed of cattle, ſheep, &c. or of trying any uſeful experiment in huſbandry.

ADVERTISEMENT.

INTRODUCTION.

NORTHAMPTONSHIRE is an inland county, ſituated within the 53d degree of north latitude, and near the centre of England. It is bounded on the eaſt, by the counties of Cambridge and Huntingdon; on the ſouth, by Buckingham and Bedford; on the weſt, by Warwick and Oxford; and on the north, by Leiceſter, Rutland, and Lincoln.

This county is of an oblong form; its greateſt length from the ſouth-weſt corner near Aynhos, to the north-eaſt boundary at Crowland, is 65 miles; its greateſt breadth from Higham Park on the eaſt, to Stanford on the weſt, is 32 miles; but its mean breadth may be reckoned at 14 miles, making a ſquare ſuperficies of 910 miles, or 582,400 acres.

Surface.—The ſurface of this county is as peculiarly advantageous for cultivation, as it is delightful and ornamental. In no other part of the kingdom, perhaps, are more agreeable and extenſive landſcapes to be ſeen. Here, there are no dreary waſtes, nor rugged and unſightly mountains, to offend the eye, or to intercept the view. The ſurface is no where ſo irregular, but it can be applied to every purpoſe of huſbandry and tillage. Every hill is cultivated, or may be kept in a profitable ſtate of paſturage, and every inequality in the ſurface contributes to its ornament and beauty.

The upper and middle parts of this county are richly ornamented with extenſive woods, which are interſected with numerous viſtas and beautiful

lawns. The various avenues of trees, extending in many parts for miles together, the rivers and ſtreams winding along the vales, and anſwering the neceſſary purpoſes of machinery, agriculture and trade,—the many beautiful villages and populous towns, with their churches and lofty ſpires, (20 of which may be ſeen at a time), when viewed from an eminence, preſent a proſpect beautifully diverſified, and highly pictureſque, and which cannot fail to delight the eye, and enliven the heart of every ſpectator.

Soil.—There is great variety in the ſoil of this diſtrict, and ſeveral very diſtinct kinds are found in almoſt every pariſh or lordſhip. Theſe may be claſſed as follows:

1*ſt*, Strong, deep ſtapled ſoil, chiefly conſiſting of clay, free from any mixture of ſtone or gravel.

2*d*, Light, thin, reddiſh ſoil, chiefly conſiſting of loam 6 or 8 inches deep, on a bed of ſtone, here called Kealy, or Scaley rock.

3*d*, A rich loam of 8 or 10 inches deep, with a mixture of gravel, the under ſtratum being clay, mixed with ſmall pieces of red or white ſtone.

4*th*, A thin, ſtaple, light clay, very retentive of water.

5*th*, Fen and meadow land.

Climate.—The climate of this county is very favourable both to health and vegetation, and this may be accounted for from its ſituation and other natural advantages.

It is abundantly ſupplied with excellent water. The ſurface of the ground is no where ſo elevated, as to confine the foggy and unwholeſome vapours (which at times ariſe in this and in every country) from being ſpeedily diſperſed. As there are no high hills here, it is in a great meaſure exempted from

deep

deep falls of ſnow, and long continued rains, which are ſo injurious to farmers in the vicinity of mountainous regions; and as the ſeaſons change gradually, the health of the inhabitants is little affected by them, and the operations of huſbandry are ſeldom long or unexpectedly ſuſpended by the inclemency of the weather.

Rivers and Waters.—There are perhaps few diſtricts better ſupplied with water than this, while the inconveniencies which ſo often happen from enjoying that advantage, are here felt but in a very inconſiderable degree. In almoſt every part, it abounds with fine ſprings, which being very plentiful in the upper part of the county, form numerous ſmall brooks and rivulets, ſeveral of which uniting in their courſe towards the ſea, at length become navigable rivers.

There are five rivers which take their riſe in this county, the *Nen*, *Welland*, *Ouſe*, *Leam*, and *Charwell*; and what is very remarkable, conſidering the different courſes which they take, the ſources of the former and of the two latter are ſaid to ſpring out of one hill, near Cateſby and Hellidon, in the hundred of Fawſley.

The *Charwell*, after running for ſeveral miles along the weſtern boundary of this county, enters Oxfordſhire, and joins the Thames at the city of Oxford.

The *Leam* joins the leſſer Avon near Warwick, and afterwards joining the Severn, falls into the weſtern ocean.

The *Nen* is the moſt conſiderable of theſe rivers. After taking its riſe, as above mentioned, it is quickly joined by a number of other ſmall ſtreams and brooks in the vicinity of Daventry, and continues its courſe from thence to Northampton, where it becomes navigable, and forms a conſiderable

able river, extending its courſe along the eaſt ſide of the county, it paſſes Wellingborough, Thrapſton, Owndle and Peterborough, and from thence, by a new cut, (called Morton's Leam), to Wiſbech, below which it diſcharges itſelf into the German Ocean.

The *Welland* takes its riſe near Hawthrope, in the hundred of Rothwell, and winding along the north boundary of the county, it paſſes by Rockingham and Stamford, where it becomes navigable; from thence to Spalding, below which place it communicates with the ſea.

The *Ouſe*, which is one of the principal rivers in the kingdom, takes its riſe from a ſpring called Ouſe-well, near Brackley, in the hundred of Sutton. It quickly leaves this county, and after taking a circuitous courſe through part of Buckinghamſhire, touches again upon it at Stoney Stratford; from whence it paſſes to Newport-pagnel and to Bedford; from which laſt place it is navigable to the ſea at Lynn.

Theſe are the moſt conſiderable rivers; but there are a great many ſmall ſtreams and brooks, which, after taking various windings through different parts of the county, diſcharge themſelves into one or other of theſe rivers; and beſides the convenience and advantage which the inhabitants enjoy from ſuch an abundant ſupply of water, theſe rivers and ſtreams, are not only uſeful for ſupplying the mills for grinding wheat and corn, of which there are great numbers erected upon the banks, but great advantages are alſo derived from the navigation of the *Nen* and the *Welland*, particularly the former, as it paſſes through the greateſt part of the county, and by means of which the inhabitants are ſupplied from the ports of Lynn and Wiſbech with coals, fir-timber and other articles, while conſiderable quantities

quantities of oak, bark, and grain are ſent back in return.

TOWNS, POPULATION, AND MANUFACTURES.

This diſtrict is divided into 20 hundreds *, comprifing now 316 pariſhes, or townſhips, though on the firſt diviſion of the county into pariſhes, the number was 330; but ſeveral of them have been united of late years. The principal market-towns are Northampton, (the county-town), Peterborough, Wellingborough, Kettering, Owndle, Higham-ferrers, Towceſter, Brackley, Daventry, Rockingham, Rowell or Rothwell, Weldon and Cliff. Though it was not poſſible to aſcertain the number of inhabitants with any great degree of correctneſs, yet from the information received of the population of particular pariſhes in different parts of the diſtrict, the number of inhabitants may be reckoned at 400 in each of the country pariſhes or townſhips, and 3000 in each of the market-towns, making in all 167,600,

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* England was firſt divided into tithings and hundreds by King Alfred, about the year 900. The ancient tithings conſiſted of 10 men and their families; and as by the original inſtitution, 10 of theſe tithings were directed to meet once every 2 or 3 weeks, in order to inquire into the ſtate of the country, ſuch meetings were therefore called hundreds. By this law, the honeſt inhabitants of every village or townſhip, became anſwerable in their own private fortunes and property, for all the houſe-breakings, robberies, and other depredations committed within their reſpective diſtricts, and were alſo compelled to aſſociate with their neighbours in arms, in order to ſuppreſs every act of violence, and to maintain peace and public order. And it is worthy of remark, that the damages ſuſtained by individuals, in conſequence of the very alarming riots which happened in London in the year 1780, were levied on the inhabitants at large, on the principles laid down in this very ancient inſtitution.

of which by far the greater proportion is employed in agriculture.

The principal manufactures carried on in this diſtrict, are, ſhoes, bone lace, and woollen ſtuffs, principally tammys, callimancoes, and everlaſtings.

In Northampton, and ſome of the neighbouring towns, upwards of a thouſand hands are employed, in making ſhoes for the ſupply of the army and navy, and the ſhops in London, and alſo for exportation to different parts of the world. About 7000 or 8000 pairs are manufactured weekly in time of peace; but at preſent, (July 1794), in conſequence of the war, from 10,000 to 12,000 may be manufactured in the ſame period. The price runs from 3 s. 6 d. to 15 s. and upwards the pair. The medium price may be reckoned at 4 s. 3 d. of which about 1 s. 6 d. is paid for labour.

The leather is purchaſed partly in this and the neighbouring counties, but chiefly from the London market. A journeyman earns from 7 s. to 14 s. the week; but from 9 s. to 10 s. may be conſidered as the general average.

In Wellingborough, and the neighbourhood, and towards the ſouth-weſt corner of the county, from 9000 to 10,000 perſons, moſtly young women and boys, are employed in lace making. They earn from 2 d. to 1 s. 6 d. the day, generally, however, about 6 d. nearly one ſeventh part of which muſt be deducted for materials, in the proportion as 3 s. to 20 s. and conſequently 17 s. in the pound of the value of the article are paid for labour. The price varies from three halfpence to 15 s. the yard; and what ſeems very extraordinary, riſes regularly one halfpenny the yard. The greateſt demand is for that quality which ſells from 2 s. to 3 s. *per* yard. All the thread of which the lace is made, is imported from Flanders, and the goods, when finiſhed, are partly exported to America, the Weſt India iſlands,

and

and Ireland, but by far the greater proportion is uſed in Britain.

The woollen manufactory is principally confined to Kettering, and its neighbourhood. This manufacture was in the higheſt perfection it has ever attained at the beginning of the preſent war. A very conſiderable number of perſons were employed, in the different branches of it, at that time. It is difficult to form any probable gueſs at the number; but perhaps from 5000 to 6000 would not be an extravagant calculation. At preſent, not more than one half of the number of perſons are employed in it. The wool, in the firſt inſtance, is bought by the manufacturers of the growers, or farmers in the neighbourhood. It then undergoes a very minute aſſortment; and the different kinds of wool, which are found in every fleece, are appropriated to ſupply the proper markets, in the different parts of the kingdom where they are reſpectively manufactured. Thus, for inſtance, the coarſeſt, or long-ſtapled wool, is ſent into Yorkſhire, where it is made into broad cloths and flannels; the fineſt, or ſhort-ſtapled, is reſerved for the home manufactory, for the purpoſe of being made into tammys; and ſome of the moſt inferior of the laſt deſcribed wool, is likewiſe conſumed here in making calamancoes and everlaſtings. After the wool is ſorted, and the different kinds are aſſigned, to the reſpective purpoſes for which they are beſt adapted; that which is intended to be manufactured at home, is combed, and then delivered out, in ſmall quantities, to the lower claſs of people in the neighbourhood, to be ſpun and reeled, for which they are paid ſo much *per* pound, according to the fineneſs of the thread into which it is converted; it is then returned home to the manufacturer, who has it wove into ſuch kind of ſtuff as the quality of the thread will beſt anſwer. As ſoon as the goods are completed, they

are immediately ſent to the London and the Yorkſhire markets, where they are purchaſed by perſons who dreſs and dye them, and prepare them either for the ſupply of their retail cuſtomers, or for exportation to foreign markets. The ſpinning and reeling are chiefly performed by the females, and boys from 10 to 14 years of age. The price allowed, is from 10 d. to 1 s. 6 d. *per* pound. A tolerable ſpinner, who is induſtrious, earns, upon an average, 6 d. *per* day. Sorters are paid at the rate of 6 d. *per* tod of 28 lb.; combers receive 2 s. for every 13 lb. of wool. A good hand will make 9 s. or 10 s. *per* week. A weaver from 5 s. 6 d. to 6 s. 6 d. *per* piece for tammys, conſiſting of 32 yards in length, by 22 inches in breadth; and for everlaſtings, from 5 s. to 17 s. *per* piece of the ſame ſize, according to the fineneſs; and a good weaver will earn 1 s. 6 d. *per* day.

STATE OF PROPERTY.

There are many very conſiderable eſtates in this diſtrict, and by far the greateſt part of the landed property is in the poſſeſſion of noblemen and gentlemen, who reſide at leaſt ſome part of the year in the county.

There are few eſtates, the rentals of which exceed L. 10,000 *per annum;* there are a great many others under that ſum, down to L. 1000 a-year, and the remainder of the property is either poſſeſſed by thoſe whoſe rentals amount to from L. 500 to L. 800, or by that reſpectable claſs of men who have been long known in England under the denomination of *Yeomanry*, who either occupy their own eſtates, of the value of from L. 100 to L. 300,

or

or who, beſides their own eſtates, rent extenſive farms from the landlords in their neighbourhood.

EXTENT OF FARMS, LEASES AND RENT.

There are no very large farms in this county; for although great progreſs has of late years been made in incloſing the open fields, yet the lands have been in many inſtances parcelled and let out again to the former tenants, who occupied them in the open field ſtate, and to ſuch extent as it was ſuppoſed their abilities and circumſtances would enable them to manage properly; ſo that it is only in the old incloſed pariſhes, where there are farms of any conſiderable extent; and even there, the rent of one farm ſeldom exceeds L. 500 a-year. In the new incloſed pariſhes, the farms are generally from L. 100 to L. 300 *per annum*, and in the open field lands, the rents run from L. 50 to L. 150.

This county may be ſaid to be principally occupied (with a very few exceptions indeed) by tenants at will, the few leaſes that are granted are of no longer endurance than for 7, 14 or 21 years; and the general conditions contained in them are, that the tenants ſhall purſue a certain rotation of cropping; that they ſhall not break up any old paſture ground; that they ſhall not diſpoſe of hay or ſtraw off the farm; and that they ſhall keep the houſes, buildings and fences in proper order. The terms of entry are either at Ladyday or Michaelmas, the former being the period for entering upon a grazing farm, and the latter on an arable farm. The rent is paid half yearly, and in equal portions. The firſt payment is uſually made twelve

months after the term of entry, and ſo on half yearly during the currency of the leaſe.

The average rent of the incloſed lands, which are generally exempted from tithes, may be accounted at 20 s. the acre, that of the open field lands, which are ſubject to the payment of tithes in kind, may be reckoned at 8 s. The tithes may be reckoned at from 3 s. to 3 s. 6 d. *per* acre over the whole open field farm, including even that part of it which is annually under fallow.

MODES or TILLAGE adopted for raiſing the different Species of Crops.

In every part of this diſtrict, plowing is performed by a man and a boy, with 3, 4, and ſometimes 5 horſes in a ſingle length; and though the ſoil (as has been already obſerved) is of very different qualities, yet the ſame expenſive mode of plowing, with a few exceptions, univerſally prevails.

Wheat.—A certain proportion of the tillage lands is regularly under wheat, perhaps about one third of the whole. It is generally ſown in the open fields after fallow, but on the incloſed farms alſo, after beans or clover ſtubble. When intended to be ſown on fallow, the land is firſt plowed late in the autumn, and a ſecond time in the courſe of the ſummer, before which dung from the farm-yard, without any earth or other mixture, at the rate of 12 or 14 cart loads *, is laid on the acre; and the third

* Dimenſions of the ordinary dung cart.

Length at top,	7 feet 6 inches.
Ditto at bottom,	5 feet 9 inches.
Breadth at top,	3 feet 9 inches.
Ditto at bottom,	3 feet.
Height of ſides,	2 feet.

third plowing (for more than three plowings are ſeldom given) takes place in the end of September or beginning of October. About 3 buſhels of ſeed are ſown on the acre, the average returns may be reckoned at 26 buſhels The ſpecies cultivated here are the Hertfordſhire white, the Eſſex down, and the red Lammas, or common red. This mode of huſbandry, however, is more peculiar to the open fields. A different mode of preparing the land for wheat is practiſed in the incloſed farms, where meliorating crops can be produced.

Beans and Peas are generally cultivated ſeparately, the former in conſiderable quantities. They are commonly ſown after wheat, though beans ſometimes are ſown on lands broke up from graſs. The land is once plowed, ſometimes in winter, but generally early in ſpring, according to the ſeaſon; and in the end of February, or beginning of March, ſeed, at the rate of 5 buſhels, is ſown on the acre. This crop is in general very uncertain, eſpecially on the light lands; but may be eſtimated, for a courſe of years, and including all the various ſoils on which they are cultivated, at 14 buſhels *per* acre, on the open fields, and 20 buſhels on the old incloſed lands. The kind in uſe here, is the common horſe-bean.

Oats.—There is but a ſmall quantity of oats cultivated, compared with the other ſpecies of grain; not ſo much indeed as is ſufficient for the conſumption of the ordinary working cattle, which are principally fed with beans. Oats are here ſown after wheat, barley, and graſs. In every caſe, one plowing ſuffices, which is generally given in the ſpring. And about the beginning of March, ſeed, at the rate of 5 or 6 buſhels, is ſown on the acre. The average returns may be accounted at 36 buſhels *per* acre,

acre, on the open fields, and 40 buſhels on incloſed land. The ſpecies moſt cultivated, are what are here called the ſhort ſmall, and the Poliſh oat.

Barley is cultivated nearly in the ſame proportion with wheat. It is generally ſown after turnip. The land is once plowed, commonly about Lady-day, and ſeed at the rate of from 4½ to 5 buſhels, is ſown on the acre. The return may be reckoned at 34 buſhels the acre. The common long-eared barley is the only kind cultivated.

Rye is ſeldom cultivated here as a crop, though frequently as ſpring food for ſheep; it is generally ſown after oats or barley; the land is plowed, and the ſeed ſown immediately after harveſt, and the ſheep are folded upon it about Lady-day. This is conſidered, and juſtly, as a great improvement, as the rye is ready to be folded upon by the time the crop of turnip is eat off, and the ſheep by this means are kept on in good order, till the beginning of the graſs ſeaſon. It may alſo be obſerved, that it is an additional crop gained, becauſe the rye is eat off in ſuch time as to give an opportunity to prepare the land for a turnip-crop; indeed, all the preparation neceſſary is plowing, as in conſequence of the ſheep folding, the field muſt be well manured for the ſucceeding crop, whatever it may be.

Rape or *Cole* is alſo cultivated as winter and ſpring food for ſheep. The land is plowed three times, and generally manured before the laſt plowing with yard-dung. About one-eight of a buſhel of ſeed is ſown on the acre. The time of ſowing is in the month of June, or the beginning of July. The ſheep are folded in the ſame manner as on rye or turnip, and continue till about the end of February; and if the winter is favourable, and not very

very wet, the cole is ſometimes allowed to ſtand for ſeed, when 30 buſhels on an average is produced from the acre. This article varies very much in price, from L. 18 to L. 35 *per* laſt.

Turnips are cultivated in conſiderable quantities on every farm under tillage. The land is generally plowed four times; the firſt time, after harveſt; the ſecond time, in April; the third time, in the end of May, or the beginning of June; and the land being then manured, they begin ſowing turnip in the end of June, and finiſh about the middle, or end of July. The ſeed is always ſown broadcaſt, and very ſoon after the turnips appear with the rough leaf; they are handhoed, by way of thinning them, which operation is repeated once, or oftener in the courſe of the ſeaſon, as occaſion requires. The turnip-crops are always eat off by ſheep, and principally by lambs; though a great number of wedders are fatted for home conſumption, and for the London market, particularly about Northampton, and the higher parts of the county. The ſheep are penned on the turnip-field in ſquare folds, according to the number, about 100 commonly on an acre. Theſe pens, or hurdles, are made of the underwood ſold in the foreſts; they are made 2 yards long, and coſt about 6 d. each.

Very few cattle are fatted on turnip here; when that is done, a few of the largeſt turnips are drawn from the field, and given to the cattle in the ſtall. They are alſo occaſionally fed on hay, at leaſt once or twice a-day. An ordinary crop of turnip ſells at from L. 3 to L. 5 *per* acre, the price depending greatly on the ſeaſon, and on the price of wool.

Potatoes are not cultivated here to any extent, the quantity neceſſary for the conſumption of the inhabitants being very trifling, and the diſtance from the London market too great, to allow the farmers to ſend them there with advantage.

Meadows.—There is a very great extent of meadows in this diſtrict, not leſs than 40,000 acres. They are in general of a rich fertile nature, owing to the frequent overflowing of the waters, and poſſibly, no artificial means, in the preſent ſtate of matters can be deviſed for their improvement. Indeed, the ſyſtem of watering meadows, or any other kind of land, is ſeldom practiſed here; and it is but in very few inſtances, except along the banks of the rivers, where the lands are capable of that improvement. The moſt conſiderable track of meadow is that, on each ſide of the river *Nen*, beginning ſeveral miles beyond Northampton, and, extending down to Peterborough, which, from the circuitous direction, and various windings of the river, between theſe two points, may be ſuppoſed to paſs through a country of more than 60 miles in extent.

In the few inſtances where artificial means have been uſed in watering theſe meadows, this mode of improvement has exceeded the moſt ſanguine expectation of the farmer, not only in producing a quantity of graſs greatly more abundant than in former years, but alſo in improving the quality. But unfortunately for thoſe occupying theſe meadows, they are in general not only debarred from uſing the river, as a means of ameliorating the ſoil, but when extraordinary floods take place, the crops of hay are ſo much damaged as to be comparatively of little value. This happens in a great meaſure in conſequence of different perſons having ſeparate and oppoſite intereſts in this river.

The perſons here meant are the proprietors of the navigation, and thoſe having right to erect mills, between whom, and thoſe intereſted in the preſervation of the meadows at large, many diſputes ariſe. If an arrangement could be effected, by which a more uninterrupted courſe could be procured for the

the river, theſe extenſive meadows would certainly advance in value to the extent of ſeveral thouſand pounds a-year. It muſt alſo be obſerved, that the mills are generally built in the worſt poſſible ſituations; for in place of being erected on the ſides of the meadows, and ſupplied by a *lead* or *cut* from the main body of the water, they are built on low ground, and every miller has the command of the whole river, by which means an obſtinate man has it in his power, in time of flood, to injure his neighbours with impunity, and that too without, in any degree benefiting himſelf.

Artificial Graſſes.—The kinds of artificial graſſes uſually ſown in this diſtrict, are broad or red clover, at the rate of 20 lb. the acre. When the lands are intended to be broken up, after one or two years, the quantity of red clover is ſometimes diminiſhed, and 4 lb. or 5 lb. of trefoil are added.

When the lands are intended to lie in graſs for a number of years, the ſeeds ſown are, 4 lb. red clover, 16 lb. white ditto, and one-half buſhel rye-graſs.

Saintfoin is ſometimes cultivated, but not generally.

Chicory.—The only experiment made of this plant, is by Mr Martin, on his farm of Janſor Lodge, near Oundle. He has planted about 2 acres; and in the end of July it had a very promiſing appearance. He will, if deſired, chearfully communicate the reſult of this experiment to the Board of Agriculture.

HARVESTING THE CROPS.

The mode of harveſting the corns, which is univerſally adopted in this diſtrict, is as follows:—The wheat

wheat is reaped with the ſickle: This work is either performed by people hired for the harveſt, (which generally continues about a month), or by undertakers, who reap, bind, and ſet it up in ſhocks; for which they receive from 6 s. to 9 s. the acre, according to the bulk of the crop. And, when this operation is performed, and the wheat carried home, and put into the barns, the ſtubble is mowed with ſcythes, and raked together in heaps, which, when done by the great, or piece, coſts about 2 s. the acre. The ſtubble is carried home to the ſtack-yard, and is uſed in thatching houſes, and as litter for the cattle.

The other ſpecies of crops are all mowed by the ſcythe, either by men employed for the whole harveſt, or at a certain price *per* acre, which varies from 1 s. 3 d. to 2 s. Oats and peas are ſeldom moved out of the ſwaths, in good weather, till ready to be carried home. Barley and beans are repeatedly turned over, before they are in a condition to be built, either in the barn, or in the ſtack-yard; and when the waggons are employed in carrying home the crop, all hands, that can be ſpared, are engaged in raking the grounds, which is done with long headed rakes, made for the purpoſe. The hay harveſt operations, are carried on in the ſame manner here, as in all other parts of the kingdom.

Having been favoured with an account, of the particular days on which harveſt commenced on a farm near the centre of the county, for the laſt ſeven years, it is here ſubjoined.

1787.	13th	Auguſt.
1788.	4th	ditto.
1789.	18th	ditto.
1790.	16th	ditto.
1791.	8th	ditto.
1792.	13th	ditto.
1793.	1ſt	ditto.

MANURES.

MANURES.

Lime.—This county abounds with limeſtone in almoſt every corner, and conſiderable quantities are manufactured for the purpoſes of building, yet very little is uſed as a mean of improving the ſoil; although, where it has been properly applied, its effects have been abundantly conſpicuous. One great reaſon why it has not come into more general uſe, may be owing to many injudicious experiments having been made, where the quantity uſed has been too ſmall to produce any beneficial effects. There can be no doubt but lime applied in a proper manner, and, in ſufficient quantities, from 300 to 400 buſhels of powdered lime to the acre, would operate very powerfully on moſt of the ſoils in this diſtrict; and it is to be hoped, thoſe proprietors who pay ſo laudable an attention to the improvement of their eſtates, and of the country at large, will make ſuch experiments on their own farms, as will be the means of introducing the general uſe of this valuable manure, which has in other countries been productive of ſuch great improvements. Lime-ſhells ſell at from 6 d. to 7 d. the buſhel at the kiln, though it might be manufactured on much lower terms, in kilns properly conſtructed.

Marl is not uſed here as a manure, though there is rich ſhell-marl in different parts of the county, particularly on his Grace the Duke of Buccleugh's eſtate of Boughton, and Sir George Robinſon's eſtate of Cranford. The effects of this manure, in producing great crops both of corn and graſs, are well known in many parts of Scotland, and it would no

doubt operate as powerfully here, if properly applied *.

Woollen

* The marl which has been discovered upon the Boughton estate, was found in a low, and, rather wet situation in Boughton-park, at about 20 inches from the surface, which consists of a dark rich loamy soil; a white loamy earth presents itself, mixed with a great quantity of fine small shelly substances, which, when perfectly drained and dried, either by the sun or fire, adheres together in lumps, and becomes extremely light. Upon immerging a piece of it in common vinegar, it causes a great effervescence. The shelly particles in a great measure dissolve, and the whole soon becomes a smooth liquid plaster. This stratum of white earth is from 12 to 18 inches in thickness, when another stratum is found, consisting of a darker coloured earth, with a large mixture of blue clay, and a much smaller quantity of shells than the white kind. This last stratum continues about the same depth as the former, when the strong clay makes its appearance.—The following valuable information, respecting this marl, has been given by an ingenious and learned chymist in Scotland.

"I have assayed the two marls; one of them is almost white and chalky; the other, of a "yellowish colour, and darker, and more plastic, like clay. The first is as rich a marl "as ever I assayed. It is, when perfectly dry, very nearly equal in value to the first chalk, "or best limestones; the difference is not more than 2 or 3 *per cent.*; and it has the advantage, as a manure, of not needing to be burnt. But when newly taken up from "its bed, it must contain a considerable quantity of water, and its value will be the "less by this quantity of water, whatever it is. If, for example, one ton weight of "the wet marl contains a quarter of a ton of water, it will be equal in value to three-"fourths of a ton nearly of the best unburnt limestone. The quantity of water is "easily learned, by weighing a quantity of the wet marl, and then drying it thoroughly, and lastly weighing it again.

"The yellowish and more clayish marl is of little value in comparison with the former. It contains only when perfectly dry, one part of calcareous or lime earth in ten "of marl; the nine parts being clay and sand. Marls, however, not richer than this, "are valuable in some places that are at a distance from lime, and in using them, a "greater quantity is laid on the soil, to make up for their defect in quality."

From the above chymical experiment, it appears, that the white earth contains a much larger proportion of calcareous matter, than the darker coloured. There cannot be the smallest doubt of both proving a very valuable manure, particularly for grass-ground; but a much smaller quantity will be required for that purpose, of the former, than of the latter. It is presumed a considerable quantity of this marl might be found in the neighbourhood, but chiefly in low and moist situations. The same stratas of earth here mentioned having been found, by digging in many other places, near to which this has been discovered. White earth of the same kind, has been found at the bottom of a pond in a low wet part of the park, at the distance of near 300 yards from the first situation, from which

Woollen Rags are the only artificial manure uſed in this diſtrict to any extent. Beſides, what are procured in the county, conſiderable quantities are purchaſed from Leiceſterſhire, and the other neighbouring counties. They coſt about 4 s. the hundred weight, beſides 2 s. for chopping. Six hundred weight is generally applied to an acre. This kind of manure is generally uſed as a preparation for a crop of barley, and is found to anſwer well.

Compoſt Dungbills are ſeldom made, the dung being in general carried direct from the ſtraw-yard to the field.

When compoſts are made, they conſiſt of farm-yard dung, and the ſcourings of ditches, or ſoil collected on the ſides of roads, together with a certain quantity of lime. The farmers who follow this practice, conſider the extraordinary expence, and trouble, as fully compenſated, by the benefit, which the lands receive, from the addition of the rich earth, and rotten vegetables, which are thus procured, and which operate more powerfully in conſequence of the lime, with which they are mixed.

PRE-

which it is conceived, there muſt be a continuation of the different ſtratas of earth before deſcribed; though inſtances have been known where marl of this kind has been bred, and produced, by the continual accumulation of putrified vegetable ſubſtances, particularly in low ſwampy ſituations covered, or, ſurrounded by trees, and wood, which is the caſe with the pond here mentioned.—An experiment is intended to be made this autumn in Boughton-park, by laying various proportions of the two marls upon different kinds of ſoil, and in different ſituations; the effects of which, at any future time will be very willingly communicated to the Board of Agriculture, ſhould ſuch a circumſtance be thought worthy of notice. If this kind of dreſſing is found to exceed, or even to equal the effects of common manure, it may prove an important circumſtance, as no doubt great improvements may be made upon meadow and paſture ground, where ſuch aſſiſtance can be procured. It would certainly be worth while, to procure *a marl boring iron*, to examine the ſtrata of all the meadows, and low ſpots in the county.

PRESENT STATE of the COUNTY, in regard to AGRICULTURE, and, the Modes of Management.

It has already been ſtated, that there are 316 pariſhes in the diſtrict, 227 of which are in a ſtate of incloſure, and 89 in open field; beſides which, there are many thouſand acres of woodlands, and a large track of rich valuable land, called the Great Peterborough Fen, in a ſtate of commonage; ſo that ſuppoſing the incloſed part of the county at preſent under the moſt approved modes of management, there is above one third of the whole, by no means in the beſt ſtate of cultivation of which it is ſuſceptible.

In deſcribing the preſent ſtate of the county, it may be proper to claſs it under the five following diviſions, *viz.* old incloſure, new incloſure, open field, commons, and woodlands; and to give a particular account of the different modes of management practiſed by the tenants who occupy the lands, under all theſe various diviſions.

Old Incloſures.—Perhaps one half of the incloſed pariſhes, may be denominated old incloſures, at leaſt that proportion may be ſaid to be occupied as grazing farms, which is the uſe to which old incloſed lands in this county is generally applied.

STOCK and MANAGEMENT of a FARM uſed for BULLOCKS, and SHEEP grazing, or fatting for the Butcher.

One hundred and ſeventy acres old paſture, 70 acres meadow, rent L. 300, poors rates, and other parochial taxes 5 s. 6 d. in the pound of rent, lands exonerated from tithes.

Soon

Soon after Ladyday, the farmer begins to purchaſe bullocks, and the breeds of Shropſhire and Herefordſhire are preferred. In the courſe of the ſummer a few Scotch and Welſh cattle are bought in. The ſtock never exceeds 70 bullocks and heifers. He begins ſelling off in September, and by the beginning of February the whole is diſpoſed of.

From the end of October hay is given twice a day in the field. The cattle are conſigned to a ſaleſman in London.

The expence of ſending them there, including the ſaleſman's commiſſion, amounts in ſummer to 6 s. 6 d. and in winter to 7 s. each. The buying-in price of Shropſhire and Herefordſhire cattle is from L. 13 to L. 14, and the ſelling price from L. 17 to L. 18. About 100 ewes with lamb (generally of the Shropſhire breed) are purchaſed in the month of September, at about L. 21 the ſcore. Sixty wedders of one year old, here called Shearlings, alſo of the ſame breed, are purchaſed about the beginning of winter. The price about L. 26 *per* ſcore. Begin ſelling off the lambs (many of the ewes have two lambs) in May. The average price L. 22 the ſcore. The ewes are ſold from September to December at about the ſame price with the lambs. The wedders, after they are ſhorn, are ſold in May and June, about L. 36 the ſcore. Expence of ſending to London 1 s. to 1 s. 2 d. each. A few young horſes are generally reared.

SERVANTS.

1 ſhepherd, at 8 s. *per* week.
A man or boy, at 5 s. *per* ditto.
No work-horſes or implements of huſbandry.

Dairy Farm.—Extent 200 acres paſture, and 50 acres meadow. — Rent L. 280.—Tithe-free.—Poor rates, *&c.* 3 s. Milk from 45 to 55 cows; prefers the ſhort horned Yorkſhire. Plows none of the land,

but makes as much meadow-hay as ſerves for provender in winter, and on which the cows are wholly maintained during that ſeaſon. Purchaſes ſtraw for litter, which generally coſts about 30 s. the waggon load. A few breeding mares are kept, and 5 or 6 young horſes, but no young cattle. From 8 to 10 cows with calf, and fatting for the butcher. The calves are ſold to Eſſex and other counties, where they are fed for veal. Keeps about 20 hogs in ſummer, and about half that number in winter. The buying-in prices from 20 s. to 25 s. They are kept 4 or 5 weeks, and fed entirely on milk. They are ſold in London at from 30 s. to 40 s. each. The expence of ſending there 1 s. 4 d. each. About 120 ſheep are regularly kept as a breeding ſtock. Butter, and milk for the hogs, are the only produce of the dairy. The butter is ſent twice a week to London by the ſtage-waggon. The price from May to November is 8 d. and from November to May 10 d. *per* pound. There is nothing particular in the manner of managing the dairy.

NUMBER OF SERVANTS.

2 men.
1 ſhepherd.
1 boy.
2 women.

No work-horſes or implements of huſbandry.

There are ſeveral farms, where a ſmall portion of the lands are in tillage, and which properly falls to be deſcribed under this head. The mode of management, however, is ſo nearly ſimilar (except in that particular) to the one before mentioned, as renders it only neceſſary to ſtate, that on theſe farms, a breeding ſtock, to a certain extent, is regularly kept; and that it is principally on ſuch farms, where attention has been paid to the improvement of the different breeds. The Diſhley or new Leiceſter breed

of

of ſheep, which is conſidered as the beſt yet known, is generally introduced on all theſe farms.

New Incloſures.—In what is called the new incloſed townſhips or pariſhes, a ſyſtem of alternate corn and graſs huſbandry is adopted; a certain portion of meadow is generally allotted to each farm, where it is practicable; and ſome particular fields are kept in conſtant paſturage.

PARTICULARS of a Farm, containing 220 Acres, beſides 40 Acres of Meadow.—Rent L. 400.—The Lands Tithe free,—Poors Rates, *&c.* 3s. 6d. in the Pound.

ROTATION OF CROPPING.

1ſt year, fallow, part turnip, the land dunged.
2d year, wheat, barley after the turnip.
3d year, beans or peaſe.
4th year, barley, with 18 lb. red clover to the acre.
5th year, clover.
6th year, ditto.
7th year, part beans and part oats.

NUMBER OF SERVANTS.

2 plowmen.
2 boys.
1 ſhepherd.
2 women ſervants.

STOCK.

9 horſes.
2 or 3 young horſes.
8 cows.
20 hogs, old and young.
A breeding ſtock of ſheep, conſiſting of about 200.

PAR-

PARTICULARS of a Farm, containing 200 Acres of Tillage-land, and 100 Acres in a State of Paſturage.—Rent L. 300.—Tithe free.—Poor-rates 3 s. in the Pound.

ROTATION OF CROPPING.

Oats.
Turnip.
Barley.
Wheat, with 20 lb. white clover, one-half buſhel rye-graſs, and 4 lb. red clover.
Graſs made into hay.
Ditto, paſture.
Ditto, ditto.
Ditto, ditto.

NUMBER OF SERVANTS.

4 plowmen.
4 boys.
1 ſhepherd.
2 women ſervants.

STOCK.

13 horſes.
3 or 4 young horſes.
20 cows and young cattle.
A breeding ſtock of 200 ſheep on an average.
15 hogs, old and young.

N. B. By the above rotation, fallow is excluded, one half of the farm being under corn and turnip, and the other half under graſs. Though it may be proper to obſerve here, that no general rotation of cropping is eſtabliſhed in the county, each landholder or his agent, fixing on that, for which the ſoil and ſituation of the farm is conſidered as beſt adapted.

Open Field Lands.—Without entering into a particular detail, of the wretched ſyſtem of huſbandry, univerſally adopted in the open field pariſhes in this

this part of the report, it is only neceſſary to ſtate ſimply what the ſyſtem is.

PARTICULARS of a Farm in the Open Field State, containing 100 Acres arable, 20 Acres Meadow, and 150 Acres Ley or Paſture.—Rent, L. 118.—Tithes payable in kind.—Poor-rates, and other Pariſh-taxes, 5 s. in the Pound of Rent.

ROTATION OF CROPS.

1ſt year, fallow, part turnip, the land dunged or folded with ſheep.
2d year, wheat, barley after the turnip.
3d year, beans, and a few acres under oats.

SERVANTS.

2 men.
2 boys.
2 women ſervants.
1 ſhepherd takes care of all the ſheep in the pariſh.

STOCK.

7 horſes.
9 cows.
6 or 8 hogs.
130 ſheep of all ages.

Commons.—Though there is not one acre of waſte lands in this county, properly ſo called, yet there are many thouſand acres in the open field lordſhips in a ſtate of common paſturage, which, under proper management, might be made to produce abundant crops both of corn and graſs, while at preſent they do not yield paſturage, which can at the higheſt computation be eſtimated at 5 s. the acre. Indeed, if the calculation was fairly made, the occupiers are not benefited to the extent of half that ſum, as the ſtock which they ſend to depaſture upon

 theſe

theſe commons, is liable to ſo many diſeaſes and accidents, as one year with another, nearly counterbalances any advantages which can be derived from poſſeſſing this right; while, on the other hand, the keeping ſuch extenſive tracks of land in a ſtate of commonage, is attended with one very great diſadvantage to the farmers in the neighbourhood, becauſe, while theſe rights of commonage are continued, no attention whatever will be paid to the improvement of the breed of ſtock; for it is not to be ſuppoſed, that a farmer who depends on the ſcanty food which theſe commons afford for the maintenance of his cattle, horſes and ſheep, will ever be at much expence or trouble for the improvement of the different breeds. Without enumerating all the various commons of ſmall extent, ſituated in different parts of the county, or the nature or extent of the common rights of paſturage, poſſeſſed by thoſe who reſide in the neighbourhood of the foreſts and chaſes, it may only be neceſſary here to mention particularly that of

THE GREAT PETERBOROUGH FEN.

A track of fine level land, containing between ſix and ſeven thouſand acres, of a ſoil equal to any perhaps in the kingdom of Great Britain, and ſuſceptible of the higheſt cultivation. It is ſituated between Peterborough and Crowland, towards the north-eaſt bounds of the county, and is ſubject to the depaſturage of the cattle, horſes and ſheep of 32 pariſhes or townſhips in the neighbourhood, which compriſe what is commonly called the Soke of Peterborough. The farmers who live in the townſhips immediately adjoining, conſider their right of commonage as of no value to them; and it may therefore be ſuppoſed, that thoſe who live at the diſtance of 8 or 10 miles cannot be much benefited thereby. Indeed, conſidering the preſent mode of management,

ment, it is impoſſible that any advantage can ariſe to the perſons having right therein. That it is a valuable track of land, however, if under proper cultivation, is fully aſcertained from the following circumſtance. The annual expence of keeping the drains, bridges, *&c.* in proper repair is conſiderable; and the means adopted by thoſe concerned, for raiſing a fund for this purpoſe, is to let a certain number of acres to ſome tenant in the neighbourhood for a courſe of corn cropping, for 3 or 4 years, when it generally rents at from L. 3 to L. 5 *per* acre. From this account, it may be ſafely ſtated, that if theſe ſix or ſeven thouſand acres were converted into private property, and divided into farms of a proper ſize, the whole might be rented on leaſes of moderate endurance, at from 20 s. to 30 s. *per* acre; and it may further be obſerved, that the produce of theſe lands, under that ſyſtem, would exceed what they now yield, to the extent of many thouſand pounds a-year, while the additional number of hands which would be requiſite for the cultivation of theſe farms, could not be ſhort of 1300 or 1400. The advantages, therefore, both of a public and private nature, which muſt neceſſarily reſult from a diviſion of this common, are ſo obvious, as to require no illuſtration.

The perſon who is moſt materially intereſted, is Earl Fitzwilliam, though a great many others are, to a certain extent, concerned. From the truly reſpectable character of that Noble Lord, there can be no doubt, that a proper application made to him, from all thoſe having intereſt in the diviſion, would be attended with the beſt conſequences, as, from his diſpoſition to be ſerviceable to thoſe who reſide in his neighbourhood, he would chearfully embrace ſo favourable an opportunity of materially promoting their intereſt. But as the whole inhabitants of theſe 32 pariſhes, may be ſaid to be in ſome degree concerned,

cerned, and as it would anſwer no good purpoſe, to call together ſo numerous a body of people, it might therefore be proper, that a meeting ſhould be held in each pariſh, and powers granted to one of the moſt reſpectable of the inhabitants, to meet a perſon deputed by each of the other pariſhes, in order to make the application, and procure his Lordſhip's conſent to the meaſure; and if obtained, of which there is no reaſon to doubt, application might then be made to Parliament, who would no doubt agree as to the propriety of the diviſion, and paſs a bill, appointing commiſſioners to negotiate the buſineſs in common form.

Among the various important objects, which naturally fall under the conſideration of the Board of Agriculture, there are none, which, in their conſequences, will prove more extenſively beneficial in a national point of view, than their giving every poſſible aid to thoſe ſpirited proprietors, who are anxious to promote the improvement of the country, by bringing the commons and waſte lands under cultivation, as nothing will ſo certainly promote or maintain an increaſed population.

With reſpect to what are the beſt means to be purſued in regard to the common in queſtion, it would be improper in this report to determine. It appears only neceſſary to repeat, that the improvement of it, would give regular employment to a great number of hands, and furniſh the public markets, with an additional quantity of ſeveral thouſand quarters of grain annually; all which can be effected, without being attended with any bad conſequences whatever.

Woodlands. — There are ſeveral very extenſive tracks of woodlands in this diſtrict; they conſiſt either of foreſts, chaces, or purlieu woods. The moſt conſiderable foreſt is that of Rockingham, which is ſituated in the northern parts of the county, beginning

ning near the village of Wansford, on the great north road from London to Edinburgh, extending for near 20 miles towards the centre of the county, and forming almoſt a continued chain of woodland country: There are two other extenſive foreſts, *viz.* Whittlebury and Salcey, lying towards the ſouth border of the county; the chaces are thoſe of Geddington and Yardly; the former in the neighbourhood of Rockingham foreſt, and the later in the vicinity of Salcey foreſt.

The purlieu woods, are both extenſive and numerous, particularly towards the lower parts of the county, and upon the borders of the foreſt of Rockingham; and beſides theſe, there are ſeveral ſmall tracks of woodlands, very advantageouſly and ornamentally ſituated, in many other parts of the county.

The whole of what are now conſidered to be foreſt woods, are ſubject to the depaſturage of the deer, and at a ſtated time of the year, to the depaſturage alſo of the cattle belonging to thoſe who reſide in the adjoining townſhips, and who claim to be poſſeſſed of a right of commonage; on theſe accounts, the profit ariſing to the proprietors of theſe woods, from the cutting of the timber, and underwood, is ſmall, compared with that ariſing from regular well managed purlieu woods, which are not ſubject to the annoyance of the deer and cattle.

The underwood in the foreſts and chaces, principally conſiſts of black and white thorn, aſh, ſallow, maple, and a ſmall proportion of hazle. They are generally cut at from 12 to 18 years growth; the different woods are divided into as many parts or ſales, as the number of years growth at which the underwood that is cut may amount to, ſo that a regular rotation in cutting takes place every year.

The proprietors of the underwood in the foreſt woods, are empowered by the ancient laws and cuſtoms of the foreſt, to fence in each part or ſale, as

ſoon as it is cut, and to keep it in *band*, as it is here termed, for 7 years, except againſt the deer, which are let in at the expiration of 4 years; but the cattle belonging to the commoners, are not let in till the end of 7 years from the time of cutting; ſo that there are always 7 parts or ſales conſtantly in *band*, and in which the cattle of the commoners are not permitted at any time to depaſture. But from the depredations to which the young underwood is ſubject, by ſo early an invaſion of the deer and cattle, even at the regular and ſtated times before mentioned, beſides the great damage frequently ſuſtained from inattention to the repairs of the fences, during the time it ſhould be kept in *band*; the heavy expences attending the making a new fence in the firſt inſtance, and the continual expence incurred in keeping it in repair, during the time it ſhould ſtand, make the profit ariſing from the underwood, very inconſiderable to the proprietor, compared with any moderate rent that might be expected from the land. The foreſt underwood, through he whole *ſale*, or part which is cut, does not in general bring above L. 4 the ſtatute acre, though ſometimes it is ſold as high as L. 6 the acre upon an average of the whole ſale; but this depends entirely on good management in keeping the fences in proper repair, ſo as to prevent the deer and cattle from breaking in before the limited periods, as well as in ſuffering the underwood to ſtand to a greater age than uſual.

At the time the underwood is to be cut, it is parcelled out into ſmall regular fized lots, generally conſiſting of about a ſtatute rood of ground; the diviſions of the lots are made by cutting a number of ſmall paſſages or openings called trenches, which interſect each other at regular diſtances, and theſe trenches are juſt cut wide enough to admit of a paſſage between each lot; the underwood is valued and ſold ſtanding,

ſtanding, and the purchaſers cut it and carry it away at their own expence. A conſiderable part of it is made into hurdles for folding ſheep on turnip; the remainder is applied to other purpoſes, and uſed as firewood, there being no coals in the county, but what are brought up the rivers *Nen* and *Welland*.

A fall of oak timber* is generally made at the proper ſeaſon in that part, or *ſale*, in which the underwood has been cut; and this fall conſiſts of the moſt unthrifty and unimproving trees, but the quantity and deſcription of timber, muſt depend of courſe upon the ſtate of the wood, as to the ſtock of timber.

It is a general cuſtom in the foreſt-woods, to value and ſell the trees ſtanding. Diſtinct and ſeparate valuations are generally put upon the timber, the top, and the bark reſpectively. And it ſometimes happens, that theſe three articles are ſold to three different purchaſers; but it is more uſual to ſell the tree and the top together, reſerving the bark, which is ſold to one purchaſer, previous to the fall of timber being made. The conditions and prices vary in different parts of the country; they run generally, however, at from 7 s. to 9s. in the pound of the value of the tree.

The Prices of Timber in this Diſtrict are as follow:

Oak,	from	1s. 4d.	to 2s. 6d.	*per* foot.
Aſh,	from	10d.	to 1s. 6d.	*per* ditto.
Elm,	from	9d.	to 1s. 4d.	*per* ditto.
Poplar,	from	6d.	to 1s.	*per* ditto.

Every

* There is a very ſmall quantity of the oak timber taken out of the foreſt woods conſumed in the country. It principally conſiſts of timber of a large ſize, and more fit for the uſe of the navy than for country purpoſes. It is therefore generally bought in large bargains, by contractors for the navy, who come into the county regularly every year, during the ſeaſon for felling the oak timber. But if no ſpeedy and effectual means are taken for the better management and preſervation of the foreſt woods, in order to procure a regular ſucceſſion of oak timber, the navy will, in a ſhort time, be deprived of this valuable reſource.

Every other kind of white wood, ſuch as beech, cheſnut, lime, &c. ſell at ſomething more than the price of fire-wood.

It is a certain truth, and well worthy of the ſerious conſideration of Government, that the depredations committed in the extenſive foreſts and chaſes in this county, by the deer and cattle, in deſtroying the young trees at a very early period, prevent the poſſibility of obtaining any conſiderable ſucceſſion of oak-timber, as ſcarce any ſaplings or young oaks are to be ſeen, although there are undoubtedly a great number of ſeedlings produced by the falling of the acorns; yet, when the number of deſtructive enemies, to which they are expoſed in their infancy, is conſidered, it is a wonder how any of them eſcape their devouring jaws.

If the foreſts in the other parts of the kingdom are under the ſame management, there is no man who wiſhes well to his country, but muſt be alarmed at the proſpect of the deficiency, which, in proceſs of time, muſt take place in regard to that valuable article, oak-timber, for the ſupply of the navy of this kingdom. The evil certainly requires a ſpeedy and effectual remedy to be applied. What that may be, the wiſdom of the Legiſlature can beſt determine; but, as particular attention was paid during the ſurvey on which this report is founded, to the ſtate of theſe foreſts and chaces, compared with thoſe woods which are private property, it may be proper to add, that the difference is obvious to the moſt curſory obſerver. In the one, a young thriving oak-tree is ſcarcely to be ſeen, whereas, in the other, a regular ſucceſſion appears in every quarter. The miſerable ſtate of the Royal Foreſts does not originate from any want of public ſpirit in thoſe who have at preſent the charge of them, but neceſſarily ariſes from the errors of an ancient ſyſtem, which had in view more the preſervation of deer than of timber;

timber; and conſequently ſacrificed the preſervation of the latter, for the purpoſe of ſecuring food for the former.

Perhaps the beſt plan that could be adopted, would be to diſforeſt all theſe woodlands, under ſevere reſtrictions however, in regard to certain proportions of them being continued as foreſts for the production of oak timber. Thoſe having right to the timber and underwood, being alſo bound to give a compenſation in land to the commoners, having a right of commonage in theſe foreſts and chaſes, and according to the nature and extent of their different rights. Were ſome ſuch plan adopted, certain conſiderable portions of theſe foreſts and chaſes, might be devoted ſolely to the purpoſe of growing oak-timber, and one perſon only having intereſt in them, there is no doubt proper attention would be paid, in order to bring on a regular ſucceſſion of timber, which could be effected, whilſt at the ſame time, a conſiderable improvement might be made in the growth and value of the underwood.*

FARM

* I am indebted to Mr EDMONDS of Boughton-houſe, for thefollowing very intereſting Obſervations, and for many others ſcattered in various parts of the Report.

Purlieu woods are thoſe woods which are ſituate immediately in the vicinity of the foreſt, and which, at one time formed a part of it; but the reſpective owners having at ſome former periods, obtained grants and permiſſion from the Crown to diſaforeſt them, and to conſider them as their own private property, they are not now ſubject to any of the laws and regulations to which foreſt-woods are ſubject.

MANAGEMENT OF PURLIEU WOODS.

THE management of what are called purlieu woods in this diſtrict, differs materially from thoſe of the chaſe and foreſt woods. Theſe woods being entire property, of courſe there is no obſtacle to prevent the proprietors of them from purſuing the beſt mode of cultivation and management in their power; but this advantage has been in very few inſtances taken; and little improvement towards rendering them more productive and profitable to the reſpective owners has been made. The underwood in theſe woods principally conſiſts of hazle, aſh, ſallow, white and black thorn, and ſome maple; it is generally cut from 11 to 14 years growth, when the ſeaſon for cutting

arrives,

FARM BUILDINGS.

In this county, as well as in the greater part of England, the farmers ſtill live crowded together in villages,

arrives, which is as ſoon as the leaves are completely off. That operation is performed under the direction of the owner of the woods or his agent. The part intended to be cut is parcelled out for the convenience of the purchaſers into regular ſized lots, conſiſting of 20 ſtatute ſquare poles each. The whole of the underwood growing upon each lot is indiſcriminately cut, and laid in one direction, on the ground from which it is produced; and in ſome inſtances care is taken to ſelect ſuch aſh poles, as are of a larger ſize and proper to be converted to more valuable purpoſes, than thoſe which are indiſcriminately ſold with the underwood. So ſoon as the operation of cutting is completed, and the wood parcelled out as above deſcribed, a valuation is put upon each lot or parcel, according to its quality, and what it may conſiſt of; and the whole is then ſold to ſuch perſons as may be inclined to purchaſe the reſpective lots or parcels, who, over and above the price of the underwood, repay the expence of cutting it, which is proportioned at ſo much *per* pole upon each lot according to its quantity. Such as the preſent mode of management is in theſe woods, their produce is much more conſiderable to the proprietor than foreſt or chaſe woods; but it is believed it is by no means equal to the produce of well cultivated woods in other parts of the kingdom. The average price of underwood, cut from 11 to 14 years growth, is about L. 6 *per* ſtatute acre; but it is ſometimes ſold ſo high as L. 8 *per* acre.

The underwood of the purlieu woods, as well as of the other woods in this diſtrict, (the management of which is exactly the ſame as that of the purlieu woods), is principally bought by bakers, who conſume it as fuel. A conſiderable quantity of the ſmooth wood is manufactured into ſheep-hurdles, which are uſed for temporary fencing: but in all caſes, a reſervation is made by the purchaſers of the aſh and ſallow poles which are uſed for various uſeful purpoſes in huſbandry. A fall of oak timber is uſually made in that part or quarter from whence the underwood is cut; the quantity of which, of courſe, depends upon the ſtate of the wood, as to a ſtock of timber.

The oak timber in the purlieu and private woods, on account of there being ſo good a ſucceſſion, as well as on account of there being a great deal of underwood, ſeldom attains to ſo large a growth as that found in the foreſt and chaſe woods; it is therefore much more fit and convertible for country uſes, and for all purpoſes of building and huſbandry, and is principally bought by carpenters, joiners, wheelwrights, and other artificers in the neighbourhood.

Chaſe Woods.—There are two chaſes in the county, *viz.* Geddington and Yardly. The former was once a part of Rockingham foreſt; but permiſſion was given by the Crown

villages, or townſhips, as was the practice in the moſt remote ages, and when the ſyſtem of open,

or

Crown many years ſince, to the anceſtors of the Montagu family to diſforeſt it, and to convert it into a chaſe; the latter, it is preſumed, was once a part of Salcey foreſt, and has been diſforeſted likewiſe.

Geddington Chaſe, is ſuppoſed to contain about 1400 acres, of which perhaps 1200 acres are woodland, the remainder conſiſts of lawns, plains, ridings and viſtas. The whole is now the joint property of his Grace the Duke of Buccleugh, and the Right Honourable Earl Beaulieu, ſubject to a commonage at a ſtated time of the year, *viz.* from May-day to about Martinmas, for the adjoining townſhips. Deer are kept in it; and it is in every reſpect managed like the foreſt woods, as to fencing out the deer and commoners cattle from that part which is annually cut. The woodland is divided into 18 parts or ſales; in one of which the underwood is cut, and a fall of timber made every year. It is afterwards fenced in for 7 years, (*viz.* 4 years from the deer, and 7 from the cattle); ſo that there are always 14 parts out of 18 open to the former, and 11 parts out of 18 open to the latter, beſides the plains, ridings and viſtas, a ſmall part of which only are at any time included within the fence of the parts which are cut. Although there is at this time a valuable ſtock of oak timber in this chaſe, principally conſiſting of trees of a large ſize, and which have been the growth of ages; yet perhaps this extenſive and valuable track of woodland exhibits at this moment the moſt ſtriking and lamentable inſtance of the evil and pernicious conſequences that muſt inevitably attend property circumſtanced as the foreſt and chaſe woods are. The depredations and ravages committed by the deer and cattle upon the young ſprigs and coppices, at ſo early an age, not only prevent even the ſmalleſt poſſibility of obtaining a regular ſucceſſion of oak timber, but cauſe a daily diminution in the growth of the underwood. The injury ſuſtained by the deer being admitted into the young ſpring wood in the firſt inſtance is very conſiderable; but that injury is ſmall indeed, when compared to the deſtructive havock made by the devouring jaws of a herd of hungry cattle, admitted into the young coppice juſt as the leaves have begun to appear, and at a ſeaſon of the year when it ſome times happens they have juſt ſurvived a ſtate of famine, the conſequence of a want of ſufficient fodder, in a hard and ſevere winter. All the townſhips uſing a commonage in theſe woods (except one) are in an open field ſtate, and no attention is paid by the occupiers to the deſcription of cattle bred and reared, which are of the moſt inferior kind, and which, in conſequence of the inability of the occupier of an open field farm to procure a ſufficiency of food for their ſupport in the winter ſeaſon, are reduced to an extreme ſtate of leanneſs and poverty at the time they are turned into the woods, when whole herds of them ruſh forward like a torrent, and every thing that is vegetable and within their reach, inevitably falls a ſacrifice to their voracious and devouring appetite. Under theſe circumſtances it is not at all ſurpriſing that contagious maladies are frequently the fatal conſequence; to which cauſe a

conſiderable

or common field huſbandry univerſally prevailed. Though theſe crowded ſituations might no doubt be

conſiderable number of cattle fall victims, and the loſs ſuſtained by the owners not only deprive them from receiving any profit or emolument from thoſe that are fortunate enough to ſurvive the malady, but prevent their deriving any advantage from the commonage that year, and probably for many years to come. Such are the inconveniences which muſt ever attend property held under a mixture of intereſts ſo extremely inimical to each other, as thoſe of the commoner and the proprietor of the timber and underwood are in woods of this nature. Can there at this time be a ſubject to which the wiſdom of the Legiſlature ought more ſpeedily to be directed? The great and alarming decreaſe of oak timber in this country is univerſally acknowledged and lamented by every individual; and it is preſumed there is not a Briton but who muſt be ſenſible how much that invaluable article tends at this moment to the preſervation and defence of his country, againſt a neighbouring nation, frantic with zeal to propagate their diabolical ſyſtems throughout the civilized world. Thoſe who are in the habit of managing woods, no doubt feel a very ſenſible reſpect for ſo fine and venerable a production of nature as that of an oak tree arrived at its full perfection, both in ſize and growth; it is truly a living monument of the works of the Creator; and no one can direct the fatal axe to be applied to its root, without reflecting that he is about, in a few minutes, to deſtroy what whole ages have been employed in producing; but it would, it is conceived, be ſome conſolation to ſuch a perſon, could he diſcover in looking round this venerable trunk, ſome companions left to ſurvive its loſs, and who, in a young and thriving ſtate, might receive additional vigour by the removal of their neighbour. But this, alas! in the preſent ſtate of things, is a conſolation that cannot be obtained; for it muſt be next to a miracle indeed, if a young oak ſapling eſcapes the numerous enemies to which it is expoſed in its infancy. And if the ſyſtem now practiſed in theſe woods, with regard to cutting down all ſuch timber trees as appear mature, and in an unthriving ſtate, is long purſued, the reſult muſt be, that in a very few years, there will not be a ſingle oak tree large enough for the uſe of his Majeſty's navy left in them.

It is preſumed, the ſame facts and circumſtances here ſtated, will apply to many thouſand acres of woodland in this county, as well as to many very conſiderable tracks of the ſame deſcription in the kingdom. Muſt it not then be a ſerious, important, and very lamentable reflection to the mind of every man who wiſhes for the preſervation of his country, that the Legiſlature do not immediately take ſome active and vigorous meaſures to avert the impending evil that muſt otherwiſe inevitably take place.—— Before thoſe advantages that will attend an improved ſyſtem of management in the foreſt and chaſe woods are enumerated, it will be neceſſary to take the liberty of ſuggeſting the mode by which they may be attained. An incloſure of all the open field pariſhes, having a commonage in the woods, muſt undoubtedly be the firſt and princi-

pal

be attended with conſiderable advantages in ancient times, and though the ſyſtem of open field huſbandry, where

pal object to be obtained. That incloſure ſhould extend to ſuch parts of the foreſt and chaſe woods as are ſituated within thoſe pariſhes reſpectively. The act of Parliament to be obtained for the purpoſe ſhould contain proper powers for the commiſſioners therein appointed, to aſcertain the value of the whole commonage in the woods, and to divide and proportion the value of that commonage among the ſeveral townſhips or pariſhes, according to the number of perſons who may be found by them in each pariſh or townſhip, to be entitled to any ſhare or proportion of ſuch commonage, and according to their reſpective rights and intereſts. The commiſſioners ſhould alſo be empowered to ſet out ſo much land, being part of the eſtate which the proprietor of the woods may be poſſeſſed of in each pariſh or townſhip, to every commoner, as they may judge equal in value to the proportion of the commonage to which ſuch commoner may be entitled, and which they may judge to be a full and adequate compenſation to ſuch commoner for his right and intereſt in the foreſt or chaſe woods. The land ſo to be given in compenſation to each commoner, as aforeſaid, to be added to the allotment of land which each commoner may be entitled to, in right of his eſtate and intereſt in the open fields and commons, which allotment ſhould be laid as contiguous to the dwelli g-houſe or homeſtead of the commoner as poſſible. It is preſumed this mode might be adopted in all caſes where the proprietor of the woods is poſſeſſed of an eſtate, and property in the open fields and commons, or of any old incloſed lands belonging to the pariſh or townſhip in which the woods may be ſituated, to enable the commiſſioners to ſet out a ſufficient part of ſuch property as they may judge equal in value to the whole of the commonage of ſuch pariſh or townſhip; but inſtances may occur where the proprietor of the woods may not be poſſeſſed of either of thoſe advantages; in that caſe, a ſufficient quantity of the woodland might be grubbed up and cleared, and conſidered as part of the land intended to be incloſed, and might be valued and allotted by the commiſſioners accordingly.

The preſent ſtate in which the foreſt woods are held, it is feared, will nevertheleſs in a great many inſtances make it impoſſible for the ſyſtem above preſcribed to be generally adopted; the remaining intereſt ſtill reſerved to the Crown, with reſpect to the deer and other matters in theſe woods, will prevent the proprietor of them from being able to accede to any meaſures that may be ſuggeſted for their advantage and improvement, until ſome previous arrangement takes place. It is hoped the commiſſioners of the land-revenue, who, it is underſtood, have now theſe matters under conſideration, will deviſe ſome means by which ſo formidable an impediment as a mixture of intereſts muſt inevitably be to the improvement and advantage of landed property, may be done away, and by which the reſpective owners and proprietors of the foreſt woods may be enabled to purſue the beſt poſſible ſyſtem of management in the cultivation of them.

The advantages reſulting from ſuch meaſures being adopted, as have been ſuggeſted, in regard to the foreſt and chaſe woods, would not only be very ſenſibly felt by the indivi-

where practiſed, precludes the poſſibility of placing the farm-houſes in centrical ſituations; yet it appears ſurpriſing that the buildings belonging to the farms in a ſtate of incloſure, ſhould ſtill remain at ſuch a diſtance from the farms; there being but very few inſtances where the houſes are properly ſituated in the centre of the farms. The inconveniences which the farmers muſt labour under in conſequence of reſiding at ſo great a diſtance from their farms; and the loſs of time and conſequent extra-expence, of bringing the produce from the extremity of the farm to their home yard, (as it is here called), and of carrying the manure to the diſtant fields, are ſo obvious, as to require no explanation.

The farm buildings are in general as badly conſtructed, as they are improperly placed. It being only on ſuch farms where the houſes have been recently built, and under the direction of the landlord's ſteward,

duals immediately intereſted, but would be ſo extenſive as materially to affect the nation at large.—*Firſt*, With reſpect to the individuals intereſted. Upon the deer and cattle being totally excluded the woods, no interior fences would be then required, and the proprietor would be at liberty to continue ſuch parts of his property as he might think fit, in a woodland ſtate, and would be enabled to introduce ſuch a ſyſtem of management in the cultivation of thoſe parts continued in wood, by means of which their produce might be very conſiderably increaſed. The remainder of the parts not continued in wood, might be cleared and grubbed up, and converted to ſome uſeful purpoſes of agriculture. The commoner, inſtead of depending upon the precarious and uncertain advantage ariſing from turning his ſtock into the woods would become the poſſeſſor of a portion of land, the produce of which, when properly cultivated, would be a certain and valuable reſource in contributing towards the maintenance of himſelf and family. *Secondly*, With regard to the national advantage. Upon the incloſure of the fields and commons, an improved ſyſtem of management in the cultivation of the arable lands would take place, by which means an increaſed quantity of corn and grain would be brought to market. The paſture land might be very much improved by the aid of meliorating crops and artificial graſſes, which would be the means of producing an improved breed of cattle and ſheep. And, *laſtly*, Property, in however ſmall portions it might be diffuſed, would become entire and free from thoſe inconveniences that muſt ever attend it when held and enjoyed by a mixture of intereſts ſo extremely inimical to each other.

ſteward, where any attention has been paid either to regularity or convenience.

It is the practice for the proprietor, to furniſh materials, (except ſtraw for thatch), and the tenant to be at all the other expence of repairs. And therefore, conſidering the uncertainty of the tenure on which he holds them, it is no wonder that he ſhould allow the houſes to fall into a ruinous condition. Upon the whole, it is certain that the farm-houſes in this diſtrict, are not kept in that tenantable ſtate of repair, which is for the mutual intereſt of the landlord and tenant.

The farm-houſes are built either of ſtone or brick, and covered with ſlate or ſtraw. The barns, which are very large in proportion to the farm, owing to the practice which here prevails of houſing as much of the crop as poſſible, are either built wholly of ſtone, and clay uſed as cement, or partly of ſtone wall, on which a houſe framed of wood (generally oak) is erected, and plaſtered over the ſides with clay. They are commonly thatched with ſtraw. The byres, ſtables, *&c.* are generally built of ſtone, and covered in the ſame manner, and with the ſame materials as the barns.

IMPLEMENTS OF HUSBANDRY.

The waggons, carts, rollers, and other implements of huſbandry, are ſo ſimilar to thoſe in uſe in the neighbouring counties, and which have been fully deſcribed in ſome of theſe reports, particularly in that of Leiceſter, that it is deemed unneceſſary to fill up this report, with what would have ſo much the appearance of repetition.

The

The principal implement, the plough, is a clumſey piece of work, with a long maſſy beam, and an ill formed timber mould-board, better adapted as a machine for 4 or 5 horſes to pull along, than for the purpoſe of turning over a neat clean furrow. And it cannot admit of a doubt, but that with a well conſtructed light plough, with a caſt iron mould-board, (ſuch as are common in many parts of England and Scotland), a man with two horſes a-breaſt, and without a driver, would do as much work, and to better purpoſe, than is here done by a man and a boy, with 3, 4 or 5 horſes; indeed by the practice of the county, this is clearly admitted, as a double furrow plough, of a ſimilar conſtruction with the other, is pretty generally uſed, and which does double work with the ſame number of horſes.

LABOURERS, AND THE PRICE OF LABOUR.

As there are no large manufacturing towns ſituated in this diſtrict, the variations in the price of labour are not conſiderable; and it is, upon the whole, more moderate than could well be expected.

The wages of a ploughman by the year, are from L. 8 to L. 10, with board and waſhing.

A young man or boy, from L. 4 to L. 5.

A female ſervant, about L. 4, 10 s.

A labourer in ſummer, receives 1 s. 4 d. without board, and in winter 1 s.

In hay-harveſt, a man earns from 9 s. to 10 s. *per* week, and a woman 4 s. without board; though each is allowed a certain quantity of beer.

In corn-harveſt, a man hired by the month, receives about L. 2, 10 s. beſides board; a woman is paid at the rate of 1 s. the day without board.

A buſhel of wheat is threſhed at 2 s. 6 d. oats, 1 s. 4 d. barley, 1 s. 9 d. and beans, 1 s. 3 d. *per* buſhel.

A carpenter by the day, has 2 s. 4 d. in ſummer, and 2 s. in winter.

A maſon 2 s. 4 d. without board.

A blackſmith charges 5 d. for a horſe-ſhoe.

Wrought iron, ſuch as is uſed in mounting ploughs or carts, coſts 4$\frac{1}{2}$ d. the pound.

Incloſing land, which is here always done with ditch and hedge, coſts 1 s. 6 d. the running yard, and includes the price of the quicks, caſting the ditches, a double row of poſt and rail, and keeping the hedges clean and the fences in repair for 5 years.

Labour commences in ſummer at 6 o'clock in the morning, and ceaſes at the ſame hour in the evening; during hay and corn harveſt, labour begins at 5 o'clock in the morning, and ceaſes about 7 o'clock in the evening; and in winter, the operations of huſbandry go on from day-light to dark.

A man and a boy with 3 or 4 horſes, and a one furrow plough, will plow one acre in the day. This is done in what is here called one journey: In ſummer they are at work by 6 o'clock in the morning, and go between 7 and 8 hours without interval; after which the men are principally employed during the remainder of the day in providing food for the horſes.

The maintenance of the ſervants is here a very expenſive article to the farmer. The breakfaſt conſiſts of cold meat, with cheeſe, bread and beer. For dinner, roaſt or boiled meat with pudding, and for ſupper the ſame as at breakfaſt; and beſides ale that they are allowed on extraordinary occaſions, they have ſmall beer at command at all hours. The luxury in which this claſs of people live, accounts

in a great meaſure for the neceſſity of levying ſuch immenſe ſums annually for the ſupport of the poor in England. While it is perfectly certain, that a perſon living in Northumberland, or North Britain, on ordinary fare, will do fully as much work, and to as much purpoſe, as a Northamptonſhire ploughman, who is maintained at a much greater expence.

POOR-RATES.

The poor-rates vary greatly in this diſtrict; in the country villages they run from 2 s. to 5 s. in the pound of real rent, paid by the tenant to his landlord, and in the towns much higher, particularly at Kettering, where, owing to the late decline in the woollen manufacture, they are advanced ſo high as 1 s. in the pound.

It might juſtly be deemed preſumption in the writer of this Report, were he to enter fully into the diſcuſſion of a ſubject ſo complicated as that of poor-rates; and in the inveſtigation of which, ſo many able pens have been employed. He cannot however avoid remarking, that the evil appears to be getting to ſuch a height, as will render it ſoon neceſſary to adopt ſome meaſures more effectual than any that have hitherto been attempted, in order to keep this heavy tax within any reaſonable bounds. And what is of ſtill more importance, to curb that ſpirit of licentiouſneſs, which ſo generally reigns within the walls of a pariſh work-houſe, from whence ſhame and honeſt pride ſeem to be for ever baniſhed.

MARKETS

MARKETS and FAIRS.

Beſides the weekly markets which are held in all the principal towns, for the ſale of butcher-meat, and other articles of proviſions, there are ſeveral ſtated annual fairs for the ſale of cattle, horſes and ſheep.

The price of proviſions are as follow:

Beef and mutton, 4½d. *per* lb.	A gooſe, 3 s.
Lamb, 5 d. to 6 d. *per* do.	A turkey, 3 s. 6 d.
Veal, 4 d. do. do.	A duck, 1 s.
Pork, 4½ d. do. do.	A hen, 1 s. 3 d.
Butter, 8 d. to 10 d. do.	A chicken, 6 d.
Cheeſe, 4 d. to 5 d. do.	Eggs, 6 d. *per* ſcore.
Bread, 1½d. do.	

The quantity of wheat and flour which is annually exported from this county is very great, though it was not poſſible by any means to aſcertain the amount, as the greateſt proportion is tranſported by land-carriage; the wheat is ſold by the farmers to the millers in their neighbourhood, who convert it into flour, and diſpoſe of it in the neighbouring counties of Leiceſter, Nottingham, and Warwick, and great quantities are annually ſent down the Nen to Wiſbech. A great proportion of the barley crop is made into malt, and conſumed in the county. The oats, and a great part of the beans, are conſumed by the horſes; a ſmall quantity of beans are, however, annually exported to Wiſbech and other places.

Having been favoured with an account of the prices at which the buſhel of wheat, barley, oats, and beans was ſold on a particular farm in this diſtrict

ſtrict for the laſt ſix years, it is here ſubjoined, and may be depended upon as correct.

AVERAGE price, *per* Buſhel of Wheat, Barley, Oats, and Beans, from the year 1787 to 1792 inclusive.

	1787.		1788.		1789.		1790.		1791.		1792.		General average.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Wheat,	5	5½	5	8½	6	4½	6	6½	6	3½	5	10½	6	0 1/12
Barley,	2	6½	2	6½	2	7½	3	3	3	1½	3	4½	2	11
Oats,	2	0½	1	10½	1	8½	2	4	2	5½	2	6½	2	2
Beans,	3	7½	3	8½	3	6	3	11	3	10½	4	1½	3	9

ROADS and BRIDGES.

There are few diſtricts which can boaſt of a greater number of handſome, well built ſtone-bridges; every brook and rivulet is made paſſable by means of a ſtone arch; and the bridges on the larger rivers do credit to the public ſpirit of the inhabitants.

It is to be regretted, that as much cannot be ſaid in reſpect to the roads. Theſe, it muſt be acknowledged, diſplay no great ingenuity either in the engineer who planned, or in the undertakers or overſeers who executed the work. The great roads leading through the county are all turnpike, and are ſupported, partly by the money collected at the different toll-bars, and partly by the ſtatute-labour impoſed by act of Parliament. Each tenant who occupies a farm of L. 50 of rent being bound to perform 3 days labour of a cart with 3 horſes, and 2 men yearly, on the turnpike-roads within the pariſh, and the ſame on the private or parochial roads; and where there are no turnpike-roads within

in the pariſh, the whole 6 days labour is applied to the repairs of the pariſh-roads.

From this account it might be ſuppoſed, that the roads in this diſtrict would be kept in a proper ſtate of repair; but the contrary is the caſe, particularly in regard to the private or pariſh roads, which are in many places in a very ruinous ſituation, and, in general, ſo narrow as to admit of only one track. It is true indeed, that the country is but indifferently ſupplied with metal proper for road-making, the ſtone being very ſoft, and apt to grind into powder; —but it is equally true, that, in place of breaking the ſtone properly, and laying it on carefully to a proper depth, it is generally laid on the roads in the ſame ſtate in which it is raiſed out of the quarry; and in place of being broke with hammers, that operation is only performed in the courſe of time by the cart-wheels.

In place of employing contractors who do not reſide in the neighbourhood, and who, for the moſt part, execute the work in a very ſlovenly manner, it would be for the intereſt of all concerned, to farm both the public and parochial roads to active and intelligent farmers in the neighbourhood, who would be induced by a ſpirit of emulation, and a regard for character, to perform the work properly Till ſome ſuch plan as this is adopted, there is little chance that the roads in this diſtrict will be put in a proper ſtate of repair.

LIVE STOCK.

On the firſt view, it will appear ſurpriſing, that, in this diſtrict, where ſo great a proportion of the lands are in a ſtate of paſturage, little or no attention has been paid till of late, to the improvement

of the different kinds of ſtock; yet, when reference is made to the manner in which the farms are occupied, as before mentioned; and when the vicinity of the great London market is conſidered, it will not be thought extraordinary. Of late years, indeed, the improvement of the breed of ſheep has become an object of the firſt importance with many of the moſt reſpectable and intelligent farmers.

Black Cattle. There are very few of this ſpecies of ſtock reared in this county, a few in the open field lordſhips excepted; and theſe are ſo croſſed and mixed with the breeds of other counties, which are often improperly choſen, and are ſo ſtinted in their food, as to render them comparatively of little value.

In the few inſtances where attention is paid to the breed of cattle on the incloſed farms, the long horned are the kind moſt preferred, and are far ſuperior to the original breed of the county, both in ſize and ſhape, as well as in the other advantages which ought to be attended to by every farmer who occupies a breeding-farm, namely, their extraordinary diſpoſition to fatten, and to lay the greateſt quantity of fleſh and fat on the rump, loins, and other parts of the body, which always ſell higheſt at market.

The dairy farmers in the ſouth-weſt part of the county, however, prefer the ſhort horned Yorkſhire cows, from which county they are principally ſupplied. And, as they never rear any calves, they ſell them when a few days old, to a ſet of men who make a trade of carrying them to the markets of Buckingham, and other places, where they are purchaſed by dairy farmers from Eſſex, to be fatted for veal for the London market*.

It

* Conſidering the diſtance which theſe calves are carried, from this county to Eſſex, being from 70 to 80 miles, it may be proper to give ſome account of the extraordinary manner

It is proper in a report of this kind, to mention the names of thoſe gentlemen, and farmers, who have been moſt inſtrumental in introducing better modes of huſbandry, and improvements in the breed of ſtock; and though little has hitherto been done, comparatively ſpeaking, in introducing a better breed of neat cattle, into this county; yet, Mr Pearce of Chapel Brampton, and Mr Robinſon, at Wellingborough lodge, deſerve to be mentioned as having been at conſiderable expence and trouble in this reſpect.

Mr Pearce bought a bull calf of the late Mr Fowles of Rollright, in the year 1790, at one hundred guineas; and having ſold part of his ſtock in the year 1793, was abundantly compenſated for this outlay of money, from the very high prices which he received for what he diſpoſed of; as a proof of which, it may be mentioned, that he ſold a bull-calf of this breed, only ten days old, at 40 guineas; and, that a bull and four cows were ſold for L. 331: 5: 6.

Horſes.—There were very few work horſes bred in this county formerly, though, of late years, conſiderable pains have been beſtowed in improving the breed of this uſeful animal; and from the increaſed demand, and the conſequent high price, the attention of the induſtrious farmer, will, no doubt, be more generally turned to this important object. The horſes uſed in the operations of huſbandry,

manner in which they are tranſported. Sometimes 10, 15, or 20, are put into a cart, being laid on their backs on ſtraw, and their feet tied. They are maintained frequently for 8 or 10 days together on nothing but wheat-flour and gin, mixed together, which are here called gin-balls. In this manner, moſt of the calves bred on the other farms in the county are diſpoſed of; ſuch a number only being reared as are neceſſary for keeping up the ordinary ſtock of milk-cows.

bandry, are for the moſt part purchaſed in the counties of Derby, Lincoln, and York; they are bought in at two or three years old. The object of the Northampton-ſhire farmer being to purchaſe horſes, which are likely to anſwer either for the coach, the army, or large waggons, he keeps them two, and ſometimes three years, and generally diſpoſes of them at a profit of from L. 7 to L. 10. A horſe proper for the coach, ſells for about L. 40 at five or ſix years old; a horſe of the ſame age for the army, at about L. 25; and a dray or waggon horſe, at about L. 30.

Some years ago, it was the practice here, to rear blood horſes, but experience has proved, that theſe animals, however valuable they may ſtill be in the eſtimation of the gentlemen, are unprofitable to the farmers, becauſe the leaſt blemiſh renders them altogether unſaleable; and if they ſhould not meet with any accident, they muſt remain ſo many years on the farm, before they can be ſent to market with advantage, as to render the profit precarious, and trifling. Such horſes as are now bred are fit to go into the team at two years old, and after two or three years ſervice on the farm, they are generally ſold for one or other of the purpoſes above mentioned. It is worthy of remark, that a few days ago a horſe of the laſt deſcription, with only one eye, was ſold for forty guineas, while it is well known that a blood horſe, with ſuch a blemiſh, would ſcarcely have been worth notice.

Some of Mr Bakewell's beſt horſes have covered in this county ſome years, though at a very heavy expence to the individuals who ſubſcribed for procuring them. There is nothing, perhaps, that would tend more to the general improvement of this ſpecies of ſtock in the county, than if a number of the proprietors were to purchaſe ſome of the beſt

ſtallions

ſtallions that could be found in the neighbouring diſtricts, ſo that the tenants might be accommodated without any great expence or trouble. It was by this means that the breeding of blood horſes came into ſuch general practice here. And therefore, if the proprietors were to adopt this plan, it would induce their tenants to turn their attention to the breeding of ſuch horſes as are uſeful in the operations of huſbandry, as well as for various other purpoſes: And for which the county is peculiarly well ſituated, the diſtance from London being ſo great as to prevent the farmer from experiencing a riſe of rent, or an additional charge for labour on that account; while he is, on the other hand, within the reach of the beſt market which this or any other kingdom can afford for the ſale of draught horſes.

Sheep.—There are here three different breeds of ſheep, which may be claſſed as follows, *viz.* The original breed of the county, the old improved, and the late improved or new Leiceſter breed. About 50 or 60 years ago, when this diſtrict was in general in the open field ſtate, no attention was paid to the improvement of the breed of ſheep. The points which marked a good ſheep, in the opinion of the people of thoſe days, were, the wool thick ſet on the back, an open rump, loin wide, legs open, and bones clean from wool, oppoſed to what is now called *gum or coarſeneſs*. They were generally ſent to market from 2½ to 4 years old, and weighed on an average about 18 lb. the quarter. This breed, however, are now very rare, being confined to thoſe quarters of the county where commons abound.

About 25 years ago an improvement was attempted, by croſſing the ancient breed with tups from Warwickſhire and Lincolnſhire, the breed of Warwickſhire being noted for great bone or ſize, and that of Lincolnſhire for the quantity of wool.

With the ſucceſs of this experiment the farmers ſeemed perfectly ſatisfied, as a general opinion prevailed that the animal would feed in exact proportion to the ſize of bone, and that an additional quantity of wool might be produced, without any detriment to the carcaſs. This practice, therefore, went on for many years. The new breed improved greatly in ſize, and the farmers gave themſelves no trouble to aſcertain whether the increaſe in ſize and weight could be accounted really beneficial or not. And ſo fixed and rivetted were they in the opinion of the good choice they had made, that it was not without much difficulty they could be perſuaded of the poſſibility of introducing any additional improvement. This, however, has of late years been effected, and the new Leiceſter or Diſhley breed (which form a complete contraſt to the former) are pretty generally introduced, owing principally to the following circumſtance: Mr Bakewell, whoſe name ſtands unrivalled in this line, about the year 1788, inſtituted a ſociety, conſiſting of himſelf and 15 or 16 other reſpectable farmers in Leiceſterſhire and the neighbouring counties *. This ſociety had for its object the improvement of the different breeds of ſtock, particularly of ſheep. And by almoſt every account, they ſeem to have ſucceeded beyond their moſt ſanguine expectations.

To follow them through all the experiments which they have individually made, or to detail the proofs which they are ready to produce, in regard to the difference of bone, offall, wool, &c. in order to aſcertain the advantages which the new Leiceſterſhire breed poſſeſſes over every other, would be an endleſs

* Of this number, the following members reſide in this county:

Meſſrs J. and S. Robinſons, Wellingborough; Mr John Tomlins, Rockingham Park; Mr John Bennet, Watford; and Mr John Manning, Arſlingworth.

leſs taſk. And though theſe experiments ſeem to have been fairly and candidly made, yet, as none have been attempted, in order to prove the ſuperiority of any other breed over this, it appears a matter of more general importance, to ſtate fully in what reſpects this breed is ſaid by thoſe more immediately intereſted, to excel all others; and then leave it to the impartial public to determine whether they have ſucceeded, and to what extent.

1*ſt*, It is ſaid, that this breed will, on a given quantity and quality of food, produce a greater profit to the farmer than that of any other.

2*d*, That they are extremely handſome or well made, and therefore more diſpoſed to fatten.

3*d*, That they carry more fleſh and fat on the ſame weight or ſize of bone.

4*th*, That they will thrive on ſuch paſture as other flocks would fall off upon.

5*th*, That an acre of land will maintain or fatten a greater number of them than of any other breed which bear the ſame proportion in ſize of carcaſs.

6*th*, That though the quantity of wool is about one fifth leſs than that of the old Northampton-ſhire breed, yet the value by the pound is about one tenth more, and that for the reaſon laſt mentioned, both the quantity and quality of the wool, if the return is calculated by the *acre*, muſt be in favour of this breed.

7*th*, That this breed are ready for market in April or May, whereas the others cannot be offered for ſale before September or October; and that, therefore, not only a greater number can be kept on an acre, as above mentioned, but a ſummer's graſs is ſaved in the one caſe, which is uſed in the other.

8*th*, That the mutton of this breed, in conſequence of the cloſeneſs of its texture, will keep ſeveral hours longer in warm weather than that of any other of the ſame ſize.

Theſe

Theſe are the moſt valuable properties which this breed of ſheep are ſaid to poſſeſs over all others; and if they really do poſſeſs them, it is not to be wondered that their ſuperiority ſhould be ſo ſtrenuouſly maintained.

On the other hand, it is aſſerted by many, that all the boaſted ſuperiority conſiſts more in the high prices at which the members of the ſociety diſpoſe of their tups, than in any real improvement in the ſhape or conſtitution of the animal; and therefore they affirm, that this ſuperiority muſt fall to the ground, as the breed comes to be more generally introduced.

It is perfectly clear, that high prices given for any ſpecies of breeding ſtock, certainly does not, *in every inſtance*, prove the intrinſic value or ſuperiority of the breed; and therefore, if the new Leiceſter breed of ſheep have nothing elſe to recommend them, they will not long keep up to their preſent character; but thoſe who ſeem anxious to depreciate this breed, ought to come forward with ſomething more likely to carry conviction to the mind, than bare unſupported aſſertions, which they cannot expect will meet with much credit.

The particulars above ſtated, in which this breed are ſaid to excel all others, (and which has been inſerted here, in order to bring the queſtion fairly to iſſue), may be proved *true* or *falſe*, by every intelligent farmer in the neighbourhood; but as no attempt of this kind has hitherto been made, it is but fair at preſent to ſuppoſe that the ſuperiority really remains unqueſtionable. The writer of this Report pretends to no particular knowledge in regard to the different breeds of ſheep, and is one of thoſe who would be ready to ſuppoſe that the ſize alone is what ſtamps additional value on either a ſheep or a bullock; and, therefore, what is here ſtated, is the

the ſubſtance of what he learned in the courſe of his ſurvey, rather than his own private ſentiments. It is, however, the general opinion over the kingdom at large, whether it be *well* or *ill* founded, that the new Leiceſter breed of ſheep are ſuperior to every other. Though it is not intended to ſtate that they have attained the higheſt poſſible degree of perfection to which it is practicable to bring the ſpecies, it is preſumed that even Mr Bakewell himſelf, deeply intereſted as he is, will not maintain this point; and therefore, in place of with-holding that degree of praiſe to which this ſociety ſeems ſo juſtly entitled, it would be fortunate for the community at large, if ſome men, equally knowing and attentive, would endeavour to prove the poſſibility of improving the breed to a ſtill higher degree of perfection; in the proſecution of which attempt, every well wiſher to his country will be anxious for their ſucceſs. It may be added, that one great objection to the new Leiceſter breed of ſheep, is *their diſpoſition to fatten to an extraordinary degree*, and that they are not ſo *delicate eating* as thoſe ſheep which require longer time to be ready for the market. It is believed, that the warmeſt advocates for this breed of ſheep, will not heſitate to allow their diſpoſition to fatten, though they may diſpute the other point, which depends in a great degree on the taſte of the conſumer; but if it is certain, that a quarter of this mutton, weighing upwards of 30 lb. will only have 2 lb. weight of bone, while a quarter of *the old improved Northamptonſhire breed*, of the ſame weight, will have about 5 lb. the improvement of the breed is at once determined, ſo far as the opinion of the *great body* of the conſumers can go, as a mechanic, or labourer, who has a large family to ſupport, by his earnings, if ſenſible of the fact, will be ready to agree, with the new Leiceſter ſociety, that an improvement has really been effected, at leaſt to the

extent of the value of 3 lb. of meat, in a quarter of mutton, compared with that of an equal weight of bone. It has been calculated, that every inhabitant in the kingdom eats a ſheep in the year. The calculation does not ſeem to be extravagant, and therefore the great queſtion in a national point of view, whether the breeds of theſe animals are improved, or reduced, to the value of 1 s. the head, appears of very great importance, and no doubt merits every degree of attention which the Board of Agriculture can beſtow, the difference either way being nearly equal to L. 400,000 a-year. The manner in which this ſpecies of ſtock is managed, and the prices, and conditions on which the tups are hired out, are ſo particularly mentioned in other reports of this nature, that it is judged proper to avoid a minute detail here, as not tending in any degree to promote the object in view.

OBSTACLES TO IMPROVEMENT.

The obſtacles to improvement may be claſſed under the following heads:

The continuance of open field lands;
Tithes payable in kind; and,
The want of leaſes.

Open Field Lands.—The management of the open field farms is governed by the eſtabliſhed cuſtoms which have prevailed in the pariſh for ages. An open field pariſh may be claſſed into three diviſions, *viz.* tillage, meadow, and paſturage.

The tillage lands are cropped in the manner before mentioned, and the ſeveral occupiers muſt conform to the ancient mode of cultivation of each diviſion or field in which their lands are reſpectively ſituated; from which it will appear, that one obſti-

nate

nate tenant (and fortunate muſt that pariſh be accounted, where only one tenant of that deſcription is to be found) has it in his power to prevent the introduction of any improvement, however beneficial it may appear to the other inhabitants of the pariſh. The tillage lands are divided into ſmall lots, of two or three old faſhioned, broad, crooked ridges, (gathered very high towards the middle, or crown, being the only means of drainage that the manner in which the lands are occupied will admit of), and conſequently the farmer poſſeſſing 100 acres, muſt traverſe the whole extent of the pariſh, however large, in order to cultivate this ſmall portion. The great additional expence of cultivating lands, ſo ſituated, muſt be obvious to every farmer of common underſtanding; while the never-ending rotation of corn-crops, to which the lands are ſubjected, muſt render them incapable of producing any tolerable returns.

The meadows are kept in a ſtate of common paſturage from the time the hay is carried off till Lady-day, by which means the crops of hay are very indifferent, compared with that on incloſed lands properly managed.

The leys are generally divided into three fields; one is allotted for the paſturage of the ſheep, another for the cows, and, on the third, the ſhameful practice of *tethering* the horſes is ſtill continued. And by every information that could be procured, it appears the ſtock is not kept with a view to any profit that can poſſibly ariſe from the ſales, but merely as the means of cultivating and manuring the ſoil. Indeed, long experience has evinced, that any ſpecies of ſtock kept in theſe open fields cannot be carried to market on terms nearly ſo advantageous to the farmer, as thoſe of their neighbours, who occupy incloſed lands; nor is it to be ſuppoſed, conſidering the manner in which the ſtock is treated, that the owners will pay much attention

to

to the improvent of the different breeds. While the numerous inconveniencies attending the occupation of land, ſo diſperſed and intermixed, as open field lands always are, will remain for ever a bar to the introduction of any improved ſyſtem of huſbandry. The greateſt, indeed the *only* objection againſt incloſing is, the depopulation of the pariſh, which, it is ſaid, generally takes place in conſequence thereof: While it may be admitted, that the inhabitants of a pariſh muſt undergo a very material alteration in their ſituations, in conſequence of its being incloſed; yet it does not follow of courſe, that depopulation muſt be the conſequence, as though ſeveral of theſe who occupy ſmall farms, muſt neceſſarily be removed, in order to enable the proprietors to claſs the lands into farms of a proper ſize; yet it is equally clear, that a new ſet of people muſt be introduced, ſuch as hedgers, ditchers, road-makers, and labourers of every deſcription; and therefore, this may rather be called a ſhifting of population from one village to another, than an expulſion from one particular pariſh: And were it clear, that depopulation was the conſequence of incloſing a pariſh, that depopulation does not ariſe from the incloſing, but from the total alteration of ſyſtem which commonly takes place in the management of the lands. For if, in place of laying down the lands to graſs, which but too generally happens on all theſe occaſions, they were cultivated in an alternate courſe of corn and graſs huſbandry, the number of hands neceſſary for the cultivation, and carrying on thoſe various improvements, which would in ſuch a caſe be immediately introduced, would be at leaſt equal to the number of inhabitants in the open field ſtate.

The average rent of an acre of open field land in this diſtrict, including the value of the tithes, which may be reckoned at 3 s. 6 d. *per* acre, may amount

to 11 s. 6 d. while the average rent of an acre of the incloſed lands, which are generally exempted from tithes, may be accounted at 20 s. which makes the difference of 8 s. 6 d. *per* acre; and as there are 89 pariſhes in this county, in the open field ſtate, which may contain nearly 150,000 acres, the rent which the proprietors of theſe pariſhes loſe by keeping them in an open field ſtate, may be eſtimated at upwards of L. 60,000 a-year; while at the ſame time the introduction of improvements are precluded, and conſequently an increaſe of rent on rational principles. It may, however, be proper to add, that humanity, as well as ſtrict propriety, ſhould induce thoſe who act as commiſſioners under an incloſing bill, to give a compenſation in land in every caſe where poſſible, to thoſe having a right of commonage in the pariſh, in place of a conſideration in money, by which means theſe people, in place of being obliged to remove, would be induced to build ſmall cottages upon their own property.

One great obſtacle to the incloſing of pariſhes, ſeems to be the very great expence to which the proprietors are ſubjected, in procuring the act of Parliament, and carrying it into execution. As this complaint is general all over the kingdom, it is to be hoped, that ſome plan will be deviſed by the Legiſlature for obviating this difficulty, and of enabling proprietors to effectuate this great improvement with more facility, and at leſs expence. There is not perhaps any one circumſtance regarding the agriculture of England, that deſerves the ſerious attention of the Board of Agriculture more than this.

Tithes.—The collecting of tithes in kind is very generally complained of, and in thoſe pariſhes where that mode is adopted, it certainly operates very powerfully againſt the introduction of improvements in huſbandry; while at the ſame time it is attended with very diſagreeable conſequences, both

in a religious and political point of view, as it is often the means of creating ſuch diviſions between the clergyman and his pariſhioners, as renders the religious inſtructions of the former of little avail, while it looſens that chain of intercourſe and connection which is conſidered of ſo much importance to keep united. It has happened, (though to the credit of the clergy of this diſtrict, be it ſaid the inſtances are very rare), where the tithes have been let to a layman for the purpoſe of oppreſſion, and where he has exerted that authority with which he was inveſted, and not only taken the tenth ſhock of corn, and the tenth cole of hay, but alſo the tenth lamb, pig, hen, egg, &c. nay has even gone into the garden, and taken not only the tenth part of the fruit, but alſo the tenth of the produce of the kitchen-garden. Under ſuch circumſtances as theſe, it may be aſked, who is the farmer who would not feel himſelf aggrieved?

Many plans have been ſuggeſted, in order to bring about an arrangement of tithes, and to place them on ſome permanent footing. It has been propoſed, that the proprietors ſhould farm the tithes in each pariſh, or that a corn-rent ſhould be fixed by the average price of grain for a number of years paſt; but that which appears moſt likely to meet general approbation, and which ſeems beſt calculated to do juſtice to all parties, is to give the clergyman a compenſation for his tithes in land, becauſe the depreciation in the value of money has been ſo great, as to render any arrangement which is to be founded on it as a medium by which the value is to be aſcertained in future times, very uncertain; whereas the produce of land muſt always bear reference to the value of money at the time.

Whether the open field pariſhes are to be incloſed, or allowed to remain in their preſent ſtate, ſtill it is humbly ſuppoſed, that a general arrangement might be made reſpecting the tithes, by giving a compenſation

compenſation in land; and that upon the ſame principles, in which thoſe who act, as commiſſioners under incloſing bills, determine theſe matters, which is generally by finding the clergyman entitled to one fifth or one ſixth of the tillage land, and one ninth of the paſture, or two thirteenths of the whole pariſh.

Were this deſirable object by any means obtained, improvements in agriculture, and the different breeds of ſtock, would no doubt take place; and inſtead of the clergyman and his pariſhioners living in a ſtate of contention, or warfare, we ſhould ſee them living as one great family, in harmony and peace, and the clergyman conſidered as the parent and preſerver of that bond by which they are united.

Want of Leaſes.—Next to the modes of culture, and the management of ſtock, which *muſt* according to the preſent ſyſtem be univerſally practiſed in the open field lands, and the collecting of tithes in kind, nothing can operate ſo powerfully againſt the ſpirited exertions of farmers, in regard to the introduction of better modes of cultivation, and greater attention to the improvement of the different ſpecies of ſtock, than the *want of leaſes*.

Every farmer who poſſeſſes a farm from year to year, muſt feel *that kind of dependence* which muſt tend in a greater or leſs degree to damp his ſpirit for improvement, and muſt prevent him from doing that juſtice to his farm, which would enable him to pay the higheſt poſſible rent to his landlord, or to procure that extent of *fair profit to himſelf*, to which the extent of capital ſunk in carrying on the operations of the farm, and his own induſtry, are entitled.

In ſuch a ſituation, the *prudent* farmer muſt be reſtrained from any ſpirited expenditure, however much he may be ſatisfied that the improvements which might thereby be introduced, would, under

other

other circumſtances, prove beneficial both to hi landlord and himſelf.

In every country where improvements have been ſucceſsfully and extenſively carried on, leaſes have been granted, and every proper and reaſonable encouragement given to the tenants; and where this mode of letting lands on leaſe has been introduced, the proprietors have in every inſtance found it for their intereſt to purſue the ſame plan, becauſe they ſaw that the tenants, feeling themſelves poſſeſſed of an intereſt in the improvement of the ſoil, beſtowed every degree of attention to that object, and the landlord, at the expiration of the leaſe, conſidering himſelf juſtly entitled to derive ſome advantage from the exertion and induſtry of the former tenant, to whom he had given this aſſurance, demands and receives an additional rent. The beſt proof in this caſe, that granting leaſes is the moſt probable means of ſecuring the improvement of farms, is to refer to the particular diſtrict now under review, where it will be found, that it is only on theſe farms where leaſes are granted, that improvements are carried on to any extent.

It is true indeed, that few inſtances have occurred here, where the proprietors have not behaved to their tenants with that honour and good faith becoming their rank and fortune. Yet there are inſtances where tenants have been obliged *repeatedly* to agree to pay an advance of rent, rather than remove, while, from the uncertainty of the tenure on which they held their farms, they were debarred from making theſe exertions, which an advance of rent demanded, and which always happens in ſuch caſes when leaſes are granted.

While the proprietors remain ſatisfied with the rents which they receive, (which in general are high enough under the preſent circumſtances), it is not probable that any material alteration will take place, either in regard to the manner of letting the land, or

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the ſyſtem of agriculture. But if a general riſe of rent ſhould take place, it will be neceſſary to ſecure the tenant that permanent intereſt in the farm, which will entitle him, with propriety, to adopt thoſe means of improvement which will enable him to do juſtice both to the landlord and himſelf. It may be added, that if leaſes were granted on a reaſonable advance of rent, and for 19 or 21 years, the community at large, as well as the individuals more immediately intereſted, would be benefited thereby; and this particular diſtrict, which is ſo favourably ſituated, would, in a few years, be one of the beſt cultivated in the kingdom.

IMPROVEMENTS SUGGESTED.

From the preceding account of the modes of cultivation adopted in this diſtrict, it appears that about one third of the tillage lands have been for ages, and are ſtill continued under a conſtant courſe of corn-cropping. It is not neceſſary to point out at greater length the impropriety of an adherence to this ſyſtem, nor to recapitulate the reaſons ſtated for recommending ſo ſtrongly an alteration in the management of the commons and woodlands. What has been already ſtated, will, it is to be hoped, induce the proprietors, and thoſe immediately concerned, to turn their attention to thoſe objects, and their own good ſenſe, more than any thing that can be ſtated in a report of this kind, will enable them to adopt ſuch meaſures, as are moſt likely to promote the improvement of the country in theſe reſpects.

There is a very ſmall proportion of what may be called the old incloſed lands at preſent under the plough, and whether it is owing to that univerſal prejudice which has long prevailed among landlords, againſt the breaking up of old paſture fields, to want of activity in the occupiers, or to the improper manner in which they were at firſt laid

down to graſs, it is not neceſſary here to determine; but it muſt be obſerved, that theſe lands are not at preſent devoted to the moſt profitable purpoſe to which they might be applied, being in many places greatly over-run with ant-hills, and producing a coarſe and unwholeſome ſort of herbage. Theſe lands would, no doubt, be made much more productive by plowing, artificial manure, and other means of improvement that might be adopted. Two objections naturally occur in the mind of the landlord againſt plowing up theſe old incloſures, as they are called: The 1ſt is, That the tenant would receive a great additional advantage by the luxuriant crops of grain which he would reap, and without making any additional acknowledgment to the landlord; and the 2d is, The riſk which the landlord runs, that the tenant will not beſtow due pains in laying the fields again to graſs. But, if the ſyſtem is a good one, (and the practice of almoſt every other country proves that it is), theſe two difficulties may be eaſily obviated, as the landlord may ſtipulate with the tenant, for an advance of rent during the period when the lands are in the courſe of corn-cropping, and he has it completely in his power to puniſh the tenant for any act of impropriety he may be guilty of, in regard to the manner of laying down the lands to graſs.

The new incloſed lands are in general well managed; and where the ſoil is of a reddiſh colour, with a ſmall mixture of gravel, (of which there is a conſiderable extent, particularly towards the middle and upper parts of the county), the rotation of cropping practiſed, that of the one half in graſs, and the other half in corn and turnip, ſeems the beſt adapted for keeping it in a high ſtate of cultivation, and the alternate courſe of corn and graſs huſbandry, is probably the moſt advantageous that can be introduced, both for landlord and tenant, as, from the great number of ſheep which can be kept upon the artificial

artificial food, produced on a farm, conſiſting of a proportionable quantity of this kind of land, the occupier is enabled to relieve and aſſiſt his natural paſture grounds, as circumſtances and the ſeaſons may require. And this mode of management ſeems alſo beſt calculated to enable the tenant to pay the landlord the greateſt poſſible rent, while it prevents him from ſuffering thoſe inconveniencies which muſt neceſſarily happen by the fall of prices, to that farmer who can carry to market one ſpecies of commodity only.

To a perſon acquainted with the beſt modes of cultivation adopted in all the more improved parts of Scotland, where every kind of ſoil, from the light lands of Norfolk, to the ſtrong clays of Lincolnſhire, are to be met with, it muſt appear ſurpriſing to ſee a man and a boy, with four or five horſes, employed for the greateſt part of a day, in plowing an acre of land, while in almoſt every part of North Britain, the ſame operation is performed in leſs time by a man and two horſes, without a driver.

If neat light ploughs, with caſt-iron mould-boards, were introduced, there is no doubt but a man with two horſes, would do the ſame work which they now perform with double the number, and to as good purpoſe. It is, therefore, worthy of the attention of thoſe proprietors who take a pleaſure in cultivating a farm on their own eſtates, to make the experiment; for it is a well known fact, that by leſſening the expence of cultivation, the tenant is enabled to pay a higher rent; and a great proportion of what is ſaved in this reſpect goes ultimately into the landlord's pocket.

For the ſame reaſon, it may be proper to recommend the introduction of the machine now ſo generally uſed in Scotland for threſhing grain; and which, from ſeveral years experience, has been found to execute the work to much better purpoſe than can

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be performed by manual labour. It is worked either by 2 or 4 horſes, where water cannot be procured; and it will threſh from 20 to 40 buſhels in an hour, and ſeparates the corn from the chaff at the ſame time; while the ordinary ſervants on the farm are ſufficient to put the unthreſhed corn into the machine and carry off the ſtraw. The expence of theſe machines, on an average, does not exceed L. 80; and the intereſt of money, and annual tear and wear, may be reckoned at L. 10 a-year. In a country where the threſhing of 120 ~~buſhels~~ quarters of grain coſts that ſum, the introduction of ſuch a machine as this muſt be a great improvement.

CONCLUSION.

In the preceding Report, every degree of pains has been taken, in order to give a faithful account of the preſent ſtate of huſbandry in this county; and while, on the one hand, the defects in the modes of cultivation, and the manner in which the operations of huſbandry are in general conducted, have been freely mentioned; on the other, ſuch as appeared to be the great outlines, for improvement, have been pointed out; and after ſtating that a ſpirit for improvement is certainly introduced among all ranks in this country, and which, if properly encouraged, by the removal of theſe obſtacles which muſt ever operate as a bar againſt the general introduction of ſpirited agriculture, cannot fail to be attended with the moſt beneficial conſequences in every point of view. It therefore remains only to make thoſe acknowledgments which are ſo juſtly due, for the aſſiſtance received from many reſpectable Noblemen, Gentlemen, and Farmers, whoſe polite attention, and friendly manner of communicating their ſentiments on every ſubject connected with the ſurvey, rendered the employment in every reſpect ſatisfactory and agreeable.

Jos: Banks

APPENDIX.

COMPARISON between the ENGLISH and SCOTCH Syſtems of Huſbandry, as practiſed in the Counties of NORTHAMPTON and PERTH.

HAVING been directed by the Preſident of the Board of Agriculture, to draw up a comparative ſtatement, of the different modes of huſbandry, practiſed in the county of Northampton, which is ſituated nearly in the centre of England; and that of Perthſhire, lying near the centre of Scotland,—it may be neceſſary to ſtate, for the information of an Engliſh reader, that the county of Perth is the Yorkſhire of Scotland in point of extent, and pretty ſimilar to the Weſt Riding of Yorkſhire, and Weſtmoreland, in reſpect to ſurface and general appearance, there being many bleak barren mountains, and extenſive lakes, in each of theſe countries.

The Carſe of Gowrie, which may be very properly denominated the Garden of Scotland, is ſituated in Perthſhire. This is a track of rich deep clay land, containing about 30,000 acres, ſuperior in fertility to any in Scotland, and not to be ſurpaſſed by any of the ſame extent in England.

In order to form a correct idea of the rural economy of the two diſtricts, prior to the introduction of improvements in the modes of Agriculture in either, it may be proper to obſerve, that previous to the year 900, the ſtate of ſociety in England and Scotland, appears to have been pretty much the ſame.

About that period, King Alfred divided the kingdom of England into tithings and hundreds; and the honeſt inhabitants of every village or townſhip, became by that law anſwerable, in their own private fortunes and property, for all the houſe-breaking, robberies, and other depredations, committed within their reſpective diſtricts, and were alſo bound, to aſſociate with their neighbours in arms, in order to repreſs every act of violence, and to maintain peace and public order. In Scotland, before the laws came to be properly reſpected, or the executive government poſſeſſed that power and authority, neceſſary to prevent the great feudal Barons, and their dependents, from haraſſing and diſtreſſing their leſs power-

ful neighbours, it was common for the farmers, who then lived in villages, to enter into an agreement, called a *bond of good neighbourhood*, in which all acts which could be conſtrued into bad neighbourhood were narrated, and certain penalties annexed to the commiſſion of each, and from the joint manner in which they occupied the lands, (which was the ſame as is ſtill practiſed in the open field pariſhes in England), as well as from the conditions contained in theſe bonds, they were induced to turn out in arms, on any general invaſion of their property.

This being the ancient ſtate of both countries, and it being well known that a regular Government, together with the arts and habits of civilized ſociety, and improvements in Agriculture, were much earlier introduced into England than into Scotland, it may appear difficult to account for the manner in which both countries are now inhabited. In England the farmers ſtill living crowded together in villages, as in former times; whereas, in the cultivated parts of Scotland, every farmer lives in the centre of his own farm, as if the feudal ſyſtem had never exiſted. But that difficulty will be removed, when, on the one hand, the manner of cultivating the open field lands in England is conſidered, and that incloſing has only come into general practice of late years; and, on the other, that there does not appear to have been any commonable lands in Scotland; that ſince the year 1560, the payment of tithes in kind (except in a very few inſtances, and theſe where the tithes are in the poſſeſſion of lay proprietors) have been aboliſhed, and that the lands were in general poſſeſſed by great proprietors, who, when ever they were inclined, had it in their power, for the reaſons juſt now mentioned, to divide their lands, and make ſuch arrangements with their tenants as they judged moſt likely to promote the improvement of their eſtates; and that where a townſhip was poſſeſſed by two or more proprietors, in place of a tedious negotiation with the Clergyman, and thoſe having right of commonage, and an expenſive application to Parliament for an incloſing bill, which is the caſe in England, the diviſion of ſuch lands, was effected by an action or proceſs before a Court of law, (which was attended with little expence), or amicably ſettled, by a reference to ſome man of reſpectable character in the neighbourhood.

In the following ſtatement, attention has been paid to reduce all the articles therein mentioned, to the ſtandard of the weights and meaſures generally uſed in England, and the rents and returns in both countries, are calculated by the Engliſh acre, and by the Wincheſter buſhel of 8 gallons.

gallons. It may be neceſſary, however, to mention, that the Engliſh ſtatute acre contains 4840 ſquare yards, and the Scotch ſtatute acre 6150 ſquare yards. A quarter, or eight Wincheſter buſhels, contains 17,203 cubic inches. The boll of barley or oats, Linlithgow meaſure, (which is the ſtandard of Scotland), contains 12,822 cubic inches, and a boll of wheat or beans meaſures 8789 cubic inches.

LEASES.

NORTHAMPTON-SHIRE.

In this county, there are ſcarcely any lands held by tenants under leaſes, except thoſe granted by the Biſhop, Dean, and Chapter of Peterborough, which are for 21 years, renewable every 7.

The tenants, in general, poſſeſs their farms only from year to year. There are, however, written agreements entered into between the landlords and tenants, in which the mode of cropping the lands is ſpecified.

The farm-houſe and offices, are generally kept in repair, at the joint expence of the parties; though, in a great many inſtances, the whole expence reſts with the tenant.

The tenant, is, on all occaſions, expreſsly debarred from breaking up any old paſture-graſs, and from ſelling hay or ſtraw.

The term of entry, to a grazing farm, is at Lady-day, and to tillage lands, at Michaelmas.

The ſize of the farms is much the ſame in both counties.

PERTH-SHIRE.

There are few inſtances in this county, where lands are now poſſeſſed without leaſe. The common term of endurance is for 19 years, though ſometimes the leaſe is granted for the lifetime of the tenant, if he ſhould ſurvive after the expiration of that period.

The terms contained in the leaſe are, that the tenant ſhall receive the houſes in a complete ſtate of repair on his entry, that he ſhall keep them in proper order during the leaſe, and leave them equal in value at his removal.

Particular modes for cropping the lands are ſpecified, and certain penalties or additional rents are ſtipulated, for every deviation from theſe rules.

The tenant is generally bound to reſide with his family on the farm, and is debarred from ſubſetting or aſſigning his leaſe, and from ſelling any ſtraw off the farm.

The tenant enters to the houſes at Whitſunday, and to the lands, at the ſeparation of that year's crop from the ground. The outgoing tenant has a liberty of ſelling his laſt crop before it is reaped, and it is generally diſpoſed of in this way, which prevents any interference between the outgoing and incoming tenant.

OBSER-

OBSERVATIONS.

There is nothing that has tended ſo much, to the general introduction of improvements in Agriculture, which has taken place in Perthſhire, within theſe 50 or 60 years, as granting leaſes for a conſiderable number of years, to ſubſtantial, intelligent, and enterpriſing tenants.

By this means, artificial manures, ſuch as lime and marl, have come to be very commonly uſed; for in conſequence of receiving a leaſe for 19 or 38 years, the tenant thereby acquires a permanent intereſt in the farm, and on that conſideration, commences his operations in the moſt active and ſpirited manner, and always drains, and limes, or marls, that portion of the farm, which is in fallow, during the firſt courſe of the rotation preſcribed in the leaſe.

But a farmer in Northamptonſhire, who holds his farm from year to year, muſt poſſeſs great faith indeed in the honour of his landlord, if he expends L. 400 or L. 500 on that kind of artificial manure, (which, though ſure, is yet ſlow in its operation), or on any other means of improvement, from which immediate returns cannot be expected. And it is a certain fact, that a Perthſhire farmer would rather pay 3 s. or 4 s. *per* acre of additional rent for a farm of tillage land in Northamptonſhire, on a leaſe of 19 or 21 years, than the preſent rent, and hold the farm on ſuch an uncertainty, as ſhould prevent him in prudence from cultivating it to the beſt advantage.

RENT AND TAXES.

NORTHAMPTON-SHIRE.

The rent of incloſed lands, runs from 17 s. to 25 s. *per* acre, excluſive of tithes, from which the incloſed land is generally exempted. The average may be reckoned at 20 s. to which may be added 3 s. in the pound for poor-rates.

The open field lands run from 6 s. to 10 s. *per* acre, medium about 8 s. beſides about 3 s. 6 d. *per* acre for tithes; the poor-rates the ſame as above mentioned.

The rents are paid in money by half-yearly inſtalments. The firſt half-year's rent being payable 12 months after the tenant's entry to the farm.

PERTH-SHIRE.

The rent of lands in the Carſe of Gowrie is from 30 s. to 45 s. *per* acre, average about 35 s.

For lands in the open field ſtate, from 10 s. to 16 s. medium, about 13 s.

For incloſed lands, which are all cultivated in an alternate courſe of corn and graſs huſbandry, 22 s. *per* acre may be reckoned the medium rent.

The rents in the Carſe of Gowrie are paid partly in money, and partly in wheat and barley.

In other parts of the county the rents are paid in money, and either at Martinmas, (about the 22d of November), after reaping the crop, or, the one half at that term, and the other half at Whitſunday following.

OBSER-

OBSERVATIONS.

The difference of rent in favour of the Perthſhire proprietor, may appear ſurpriſing to thoſe, who do not know, that in Scotland there are no tithes, poor-rates, or other taxes which affect the tenant in his character of farmer. The clergymen in Scotland are all paid by the landholders. On the abolition of Popery in that kingdom, in the year 1560, the proprietors poſſeſſed themſelves of the church-lands, and a certain quantity of money and grain was then allotted to each *Proteſtant Clergyman*, which generally bore a proportion, to the ſtate of the cultivation of the pariſh, and the conſequent value of the tithes at the time.

The poor are in general maintained by the voluntary contribution of the inhabitants, which takes place every Lord's day, either immediately before or after divine ſervice. There is, however, an old Scotch act of Parliament ſtill in force, by which the proprietors and tenants are liable to be aſſeſſed *equally* in ſuch an additional ſum, as may be judged neceſſary to ſupport the poor of each pariſh; but this act is ſeldom put in force, and it only happens in thoſe pariſhes in the neighbourhood of the mountainous parts of the country, where the greateſt number of the poor people reſide.

The ſum neceſſary to maintain the poor in any particular pariſh, amounts only to a few pounds in the year, which may be accounted for, by the ſimple manner in which they live, oat-meal and potatoes being their principal food; and that when reduced by unforeſeen accidents or old age, to have recourſe to this mode of procuring a maintenance, they are ſatisfied with a very ſmall ſum, *aſking in charity*, what their neighbours in the ſame claſs in England, *demand as a matter of right*. Indeed, few only, but ſuch as are deſtitute of relations able to ſupport them, make the application, it being conſidered diſgraceful both to themſelves and their relations, to have their names entered on what is called the *poors roll*.

Another reaſon, why the rents have got ſo high in Perthſhire of late years, is the practice now univerſally eſtabliſhed of granting leaſes for a certain number of years, by which the tenants are enabled to cultivate the lands better, and conſequently to raiſe greater crops; to which may be added, the great ſaving which has taken place by ploughing with a man and two horſes without a driver, inſtead of the former practice, when a man and a boy, and four horſes, were conſidered indiſpenſably neceſſary. For it is a well known fact, that a great proportion of what is

gained by the tenant, from his ſuperior management of a farm, as well as of what he ſaves, by leſſening the expence of cultivation, ſooner or later, finds its way into the landlord's pocket.

CLIMATE.

Periods at which ſeed-time and harveſt commenced in the different counties, for the ſix preceding years, from 1788 to 1793 incluſive.

NORTHAMPTON-SHIRE.

THE periods at which ſeed-time and harveſt commenced on a particular farm in this county for the ſix preceding years, from 1788 to 1793, will be found in the following Tables:

Years.	Wheat.	Spring Corn.	Barley.	Harveſt commences.
1788.				4th - Aug.
1789.				18th ditto.
1790.				16th ditto.
1791.	5th Oct.	5th Mar.	11th Mar.	8th ditto.
1792.	6th ditto.	1ſt ditto.	15th ditto.	13th ditto.
1793.	27th Sept.	28th Feb.	21ſt ditto.	1ſt ditto.

PERTH-SHIRE.

Below is an account of the periods at which ſeed-time and harveſt commenced on a particular farm in the Carſe of Gowrie, from 1788 to 1793, incluſive.

Years.	Wheat.	Spring Corn.	Barley.	Harveſt commences.
1788.	11th Sept.	7th April.	6th May.	25th Aug.
1789.	11th ditto.	6th ditto	9th ditto.	27th ditto.
1790.	13th ditto.	3d March.	6th ditto.	27th ditto.
1791.	14th ditto.	7th ditto.	4th ditto.	18th ditto.
1792.	4th Oct.	9th April.	7th ditto.	29th ditto.
1793.	10th Sept.	25th Mar.	3d ditto.	28th ditto.

OBSERVATIONS.

By the above ſtatement, it appears, that there are about 15 days difference in the commencement of harveſt, in favour of Northamptonſhire, on an average of theſe ſix years.

The climate in the Carſe of Gowrie, may be conſidered as equal to that of any other part of Scotland. And that of the other parts of Perthſhire, as ſuperior to the northern counties of England.

ROTA-

ROTATION of CROPPING, moſt generally approved of and practiſed, in each of the Counties, for raiſing the different Species of Grain.

NORTHAMPTON-SHIRE.

The old incloſed lands are generally kept in a ſtate of paſturage.

The open field lands, at leaſt that part of them which is conſidered proper for tillage, is under a conſtant courſe of corn-cropping, as follows, *viz.*

1ſt year, fallow or turnip.
2d —— wheat, part barley.
3d —— beans, with a few acres in oats.

The new incloſed lands are principally employed in the cultivation of grain, and cropped in the manner under mentioned, *viz.*

1ſt year, fallow, part turnip.
2d —— wheat, barley after the turnip.
3d —— beans or peaſe.
4th —— barley, with 18 lb. red clover.
5th —— clover.
6th —— ditto.
7th —— part beans, and part oats.

PERTH-SHIRE.

On the rich lands in the Carſe of Gowrie.

1ſt year, fallow.
2d year, wheat.
3d year, beans or peaſe.
4th —— barley, with 20 lb. red-clover, and 1 buſhel rye-graſs.
5th —— clover.
6th —— oats.

On the lands adjoining, the following rotation is adopted.

1ſt year, peaſe, or other green crop.
2d —— wheat.
3d —— barley, with graſs-ſeeds, as above mentioned.
4th —— clover.
5th —— oats.

On the incloſed lands.

1ſt year, turnip.
2d —— barley, with 8 lb. red-clover, 8 lb. white, 4 lb. rib-graſs, and 1½ or 2 buſhels rye-graſs.
3d —— graſs, generally made into hay.
4th —— paſture.
5th —— ditto.
6th —— ditto.
7th —— oats.
8th —— barley.

OBSERVATIONS.

Without aſſerting that the rotations for raiſing the different crops of grain cultivated in Perthſhire, or on the new incloſed lands in Northamptonſhire, are the beſt adapted to the different ſoils, or ſuperior to any other

other that can be introduced, it may be proper to obſerve, that the lands under ſuch management, are much more likely to produce valuable crops, both of grain and graſs, than if they were allowed to remain always in graſs, or kept in a conſtant ſtate of tillage. Experience has indeed proved, that the beſt land in Northamptonſhire, when allowed to remain long in graſs, is apt to be over-run with ant-hills, and to produce but very indifferent crops. And it is preſumed, it will not require much reaſoning to prove, to the ſatisfaction of every intelligent farmer, that lands which are kept conſtantly under a courſe of corn-cropping, muſt be worn out and exhauſted, to ſuch a degree, as to render the crops of little value, compared to what might be expected on the ſame lands, if managed according to any of the rules above mentioned.

AVERAGE RETURN *per* Acre, of the different Species of Crops, in the different Counties, for the ſame number of Years, from 1787 to 1792, inclusive.

NORTHAMPTON-SHIRE.

Years.	Wheat.	Barley.	Oats.	Beans.	General average by the acre of all theſe grains.
	Buſh.	Buſh.	Buſh.	Buſh.	Buſhels.
1787.	28 3/4	28 3/4	43 3/4	20	30 1/2
1788.	28	29	33	21	27 1/2
1789.	21 1/4	34	53 1/4	26	33 1/2
1790.	22 3/4	35 3/4	48	29 1/4	32 1/2
1791.	22 1/4	31 1/4	39	20 1/4	28 1/2
1792.	28 3/4	27 1/4	35	20	27 1/2
Div. by 6.	152	186	252	136	180
General average,	25 1/3	31	42	21 3/4	30

PERTH-SHIRE.

Years.	Wheat.	Barley.	Oats.	Beans.	General average by the acre of all theſe grains.
	Buſh.	Buſh.	Buſh.	Buſh.	Buſh.
1787.	21 1/4	32 3/4	42 3/4	25 1/4	30 1/2
1788.	22 3/4	46 1/4	54	21	36
1789.	29 1/4	32 3/4	43 1/4	18 3/4	31
1790.	21 1/4	39 1/4	53	22	34
1791.	24 1/4	48	48 1/4	35	39
1792.	24 3/4	24 3/4	37 3/4	16	25 1/2
Div. by 6.	144	224	279	138	196
General Average,	24	37 1/3	46 1/2	23	32 3/4

OBSERVATIONS.

By the above table, it appears, that the returns by the acre of the different ſpecies of crops, except wheat, is in favour of Perthſhire, or rather

ther the Carſe of Gowrie; for the calculation is formed from the returns on a particular farm in that diſtrict, though it ſhould be obſerved, that that farm is not cultivated agreeable to the rotation above mentioned, conſiderably more than one-fixth of it being annually under wheat, ſome part of which is ſown after peaſe, or clover ſtubble; and therefore the crops muſt be ſuppoſed inferior to what might be expected, or what is really reaped, from lands regularly fallowed and dunged, either on that or any other farm in that corner of the county.

AVERAGE PRICES by the Buſhel, at which Wheat, Barley, Oats, and Beans, were ſold off a particular Farm in each of theſe Counties, for the Years above mentioned.

NORTHAMPTON-SHIRE.

	1787.		1788.		1789.		1790.		1791.		1792.		General average.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Wheat,	5	5½	5	8½	6	4½	6	6½	6	3½	5	10½	6	0½
Barley,	2	6½	2	6½	2	7½	3	3	3	1½	3	4½	2	11
Oats,	2	0½	1	10½	1	8½	2	4	2	5½	2	6½	2	2
Beans,	3	7½	3	8½	3	6	3	11	3	10½	4	1½	3	9

PERTH-SHIRE.

	1787.		1788.		1789.		1790.		1791.		1792.		General average.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Wheat,	5	5	5	4	5	9	5	5	5	0	5	5	5	4½
Barley,	2	5	2	3½	2	9½	2	7	3	0½	3	3½	2	8½
Oats,	2	5½	2	3½	2	8	2	5½	2	6½	2	10	2	6½
Beans,	3	1½	2	7½	3	7½	3	5½	3	1½	4	6½	3	5

OBSERVATIONS.

It appears that the price of oats is higher in Perthſhire than in Northamptonſhire, but that all other kinds of grain, ſell higher in the laſt mentioned county. That the price of oats ſhould be higher in Scotland than in England, will not be thought ſurpriſing, when it is conſidered, that there, the great body of the inhabitants live principally on oat-meal, whereas in England, the bread generally uſed is made of wheat flour. The difference in the prices of the other ſpecies of grain in favour of Northamptonſhire, may be accounted for, by obſerving, that Northamptonſhire is perhaps more cloſely inhabited than any other county in England, where no great cities, or large manufacturing towns are ſituated, and that therefore the farmers in general find a market for their grain at home, or in the immediate neigh-

bourhood; and that though the Carſe of Gowrie, properly ſo called, is as cloſely inhabited as Northamptonſhire, yet the inhabitants of Perthſhire bear no proportion to thoſe of Northamptonſhire, when the extent of the two counties are compared, and therefore the Perthſhire farmer, muſt look to a diſtant market for the ſale of his ſurplus grain, which he generally finds at Leith or Glaſgow, and which he avails himſelf of by means of the Frith of Tay, and the inland navigation which is opened between the Forth and Clyde, by which grain is tranſported from this laſt mentioned county, to Glaſgow, which is the beſt market in Scotland. But the farmer in Perthſhire, muſt be at an expence greater perhaps than the difference above ſtated, in conveying his grain to the beſt market; or, which is the ſame thing, muſt ſell his grain on terms ſo much lower, as to enable the merchant to tranſport it with advantage to himſelf.

DIFFERENCE of the Value of the returns by the Acre, in each of the Counties.

NORTHAMPTON-SHIRE.				PERTH-SHIRE.			
25⅓ buſhels wheat, the produce of one acre, at 6 s. 0½ d.	L. 7	13	0¾	24 buſhels wheat, the produce of one acre, at 5 s. 4½ d.	L. 6	9	0
31 buſhels barley, at 2 s. 11 d.	4	10	5	37½ buſhels barley, at 2 s. 8¾ d.	5	1	11
42 ditto oats, at 2 s. 2 d.	4	11	0	46½ ditto oats, at 2 s. 6½ d.	5	18	2
21¼ ditto beans, at 3 s. 9½ d.	4	1	6¼	23 ditto beans, at 3 s. 5 d.	3	18	7
Total average *per annum*,	L. 20	16	0	Total average *per annum*,	L. 21	7	8

OBSERVATIONS.

From the two firſt tables the above one has been formed, in order to ſhew the extent and value of the returns by the acre, in each of theſe counties, for a number of years, and by which it appears, that the balance is in favour of the Carſe of Gowrie, to the extent of 11 s. 8 d. on four acres, or 2 s. 11 d. on each acre.

It was not poſſible to aſcertain correctly the weight of the crops of hay raiſed on the acre in Northamptonſhire; but from the information received, 18 cwt. may be conſidered as the full average of meadow-hay, and about 25 cwt. that of artificial graſs.

On the farm in the Carſe of Gowrie, above mentioned, the average crop of hay by the acre, for 6 years, is nearly 29 cwt. There are no natural

natural meadow-fields in this diſtrict, nor indeed in any other part of Perthſhire, except in the valleys, and along the ſides of the ſtreams and rivers in the Highlands, where, owing to the lateneſs of the climate, and the great falls of rain to which that country is ſubject, the crops of meadow-hay are often very precarious.

LABOUR.

The PRICE of LABOUR and PROVISIONS.

NORTHAMPTON-SHIRE.

Butcher-meat, from 4 d. to 5 d. *per* lb.
Poultry, from 1 s. 2 d. to 1 s. 4 d. each.
Eggs, - 6 d. to 8 d. *per* ſcore.
Butter, - 8 d. to 10 d. *per* lb.
Cheeſe, - 4 d. to 5 d. *per* do.
The wages of a ploughman, from L. 8 to L. 10.
A young man or boy, from L. 4 to L. 5.
A female ſervant, from L. 3, 10 s. to L. 4, 10 s.
Day labouring in ſummer, without board, from 1 s. 2 d. to 1 s. 4 d.
Ditto in winter, 10 d. to 1 s.
A man for the harveſt month, from L. 2, 2 s. to L. 2, 10 s.
A woman by the day, 1 s. without board.
Grain is threſhed at from 1 s. 3 d. to 2 s. 6 d. *per* quarter.
When the ploughmen receive board-wages, it is generally at the rate of 6 s. the week all the year round; but they are more commonly maintained in bed, board and waſhing in the farmer's family.
The ordinary breakfaſt and ſupper is cold meat, with bread and cheeſe, and for dinner, either roaſt or boiled meat, with pudding. Ale is allowed them on many occaſions, and ſmall beer they have always at command.
Labour commences about the ſame hour, at the different ſeaſons, in each of the counties.

PERTH-SHIRE.

Butcher-meat, from 3 d. to 4 d. *per* lb.
Poultry, from 1 s. to 1 s. 4 d. each.
Eggs, - 6 d. to 8 d. *per* dozen.
Butter, - 6 d. to 8 d. *per* lb.
Cheeſe, from 2½ d. to 3½ d. *per* lb.
The wages of a ploughman, from L. 8 to L. 10.
A young man or boy, from L. 3 to L. 5.
A female ſervant, from L. 3 to L. 4.
Day labourer in ſummer, without board, 1 s. to 1 s. 2 d.
Ditto in winter, from 8 d. to 10 d.
A man for harveſt work (which is generally finiſhed in 20 working days), receives about L. 1, 5 s. and a woman about 17 s.
Grain is threſhed at from 1 s. 4 d. to 1 s. 8 d. *per* quarter.
When ſervants are boarded in the farmer's houſe, the ordinary fare is for breakfaſt and ſupper *pottage* made of oat-meal, ſalt and water, which is eat with milk. For dinner ſoup, or, as it is provincially called, *broth* made with pot-barley, vegetables, and butcher-meat. But the more general practice is to give each ploughman a certain allowance of oat-meal, (about 36 ounces a-day), and three pints of ſweet-milk, or double that allowance of butter-milk. They lodge and eat in a houſe diſjoined from the farm-houſe, and cook their own victuals.

OBSERVA-

OBSERVATIONS.

From the above ſtatement it appears, that the odds in the price of labour and proviſions is much leſs than could have been expected. The only material difference being in the maintenance of the farm-ſervants.

A Northamptonſhire farmer conſiders 6 s. *per* week as a reaſonable allowance for the board of a ploughman, which, for 52 weeks, amounts to - - - - - L. 15 12 0

The Perthſhire farmer furniſhes his ploughman with that quantity of oat-meal, which, on the average price of meal for a number of years, amounts to 2 s. *per* week, to which, if 10 d. *per* week is added for milk, makes the whole expence for the year - - - L. 7 7 4

For coals, bed-cloaths, *&c. &c.* may be added, 0 9 8

7 17 0

L. 7 15 0

Thus, in conſequence of the different modes in which the farm-ſervants are maintained in the different counties, the Perthſhire farmer ſaves about L. 7, 15 s. a-year for each of his ſervants, which the other muſt expend. There is no probability, however, that the Northamptonſhire farmer can avail himſelf of any information he may receive in regard to this particular, as his ploughmen will not be diſpoſed to give up their roaſt beef and pudding, and betake themſelves to oat-meal and milk. But it is humbly ſubmitted to his conſideration, whether he might not leſſen the expence of cultivating his farm, by reducing the number of ſervants and horſes. The practice of plowing with a man and 2 horſes, without a driver, is general, not only in Perthſhire, but all over Scotland. Whereas, in Northamptonſhire, a man and a boy, with 3, 4, or 5 horſes, are employed to plough an equal quantity, which, for the ſake of calculation, may be reckoned at an acre a-day in both counties; and let it be ſuppoſed alſo, that theſe men and horſes are employed in plowing the whole year round, in which period they will each have plowed 313 acres,—in that caſe the different accounts of the expence would ſtand as under.

NORTHAMP-

NORTHAMPTON-SHIRE.				PERTH-SHIRE			
Ploughman's wages,	L. 10	0	0	Ploughman's wages,	L. 10	0	0
Boy's wages, -	5	0	0				
Boy's board, at 4 s. *per* week,	10	8	0				
Maintenance of 4 horſes, at L. 15 each, -	60	0	0	Maintenance of 2 horſes at L. 15 each, -	30	0	0
	L. 85	8	0		L. 40	0	0

By the above account, including only the wages of the ſervants, and the maintenance of the horſes, which are alike in both counties, the expence of plowing an acre of land in Northamptonſhire amounts to about 5 s. 6 d. while the ſame operation is as well performed in the Carſe of Gowrie, or in any other part of Perthſhire, for 2 s. 6 d. leaving a difference of 3 s. *per* acre; but as a greater number of acres are annually plowed on every farm, in a ſtate of tillage, than the farm *really* contains, (ſome fields being repeated plowed) the additional expence of plowing a farm in Northamptonſhire, (and which it is certainly in the power of every farmer in that county to ſave), may be eſtimated at 4 s. 6 d. *per* acre. *N. B.* It is hardly neceſſary to obſerve, that the above calculation includes only ſuch articles as are the ſame in both counties, and not the *whole expence* of plowing an acre in either. It may alſo be remarked, that the total annual expence of *cultivating* an acre of tillage-land in either county, is very different from what is above ſtated; for a particular explanation of this, reference is made to the table in the report of the Carſe of Gowrie, where it appears, that the expence of cultivating a farm of 272 Scotch acres, excluſive of rent, amounts to L. 657, 6 s. 4 d. or L. 2 : 8 : 4 *per* Scotch acre.

WOODS and PLANTATIONS.

NORTHAMPTON-SHIRE.

In this county there are very extenſive woods, and foreſts, though, as has been obſerved, they are not under the beſt modes of management, nor by any means ſo profitable as they would be, if they were converted into private property.

There are no young plantations, or any means uſed, (but in particular caſes), to preſerve a proper ſucceſſion of young trees.

PERTH-SHIRE.

This county cannot *now* boaſt of foreſts or woodlands. Though from the great number of large oak and fir trees which are found in all the moſſes and ſwamps in the higher parts of the country, it is perfectly certain, that at ſome remote period, a great part of the diſtrict has been covered with trees; the only veſtiges of which that now remain, are ſeveral extenſive tracts of copſe-wood oak, along the ſides of the different rivers and lakes, which are generally cut every 25 years.

The preſent landholders, however, ſeem extremely anxious to make up for the deficiency of their predeceſſors in this reſpect. And many thouſand acres (not ſuſceptible of cultivation), are now covered with uſeful and ornamental plantations. As one inſtance of which, may it be proper to obſerve, that the Right Honourable Lord Kinnaird, a few years ago, paid L. 800 for planting 200 Scotch acres. The plants conſiſted of oak, aſh, beech, elm, plane, ſpruce, and Scotch fir, and to the number of 5000 to the acre.

OBSERVATIONS.

If more attention is not paid to the woodlands in Northamptonſhire, it is impoſſible that any ſucceſſion of trees can be preſerved, and the foreſts muſt in time fall into decay. The ancient foreſts in Perthſhire, though they ſtill retain the name, are now deſtitute of trees. And indeed there are few old trees to be ſeen in the county, except the ornamental plantations around the caſtles, and houſes, of the proprietors.

If, however, no pains is taken to preſerve a ſucceſſion of trees in Northamptonſhire; and if the ſpirit for planting, which has become ſo general among the Perthſhire proprietors of late years, ſhould continue, the

contraſt in this particular (which is at preſent ſo much in favour of Northamptonſhire) will not long continue to be ſo ſtriking.

LIME.

NORTHAMPTON-SHIRE.

There is abundance of limeſtone in almoſt every corner of the county; yet, except for the purpoſes of building, very little is manufactured in the diſtrict. Though in kilns properly conſtructed, it can be burned on terms ſo low as to enable the manufacturer to ſell it at the rate of 4 d. or 5 d. *per* buſhel.

PERTH-SHIRE.

There is no limeſtone but in the remote parts of this county, and that is of ſo hard a nature, as not to be reducible to powder, but by means of coal. The diſtance and expence of the carriage of which is ſo great, as to amount almoſt to a prohibition. Limeſtone ſhells, after being burned in the eaſt coaſt of England, and the ſouth of Scotland, is imported here by ſea, and coſts about $4\frac{1}{2}$ d. *per* buſhel.

OBSERVATIONS.

The value of lime as a manure is well known in Perthſhire, and its effects in producing great crops both of corn and graſs (after an experience of upwards of 50 years) have been aſcertained to the ſatisfaction of every farmer in the diſtrict.—The quantity of powdered lime laid on the acre in general (reckoning, that every buſhel of ſhells will produce 3 buſhels of powdered lime) is about 380 buſhels the acre; and conſequently the coſt *per* Engliſh acre is about L. 2 : 7 : 6.—Lime is generally laid on the land in the courſe of a fallow, as a preparation for wheat;—it is generally done in the month of July, or beginning of Auguſt, and plowed in with a very ſhallow furrow; and before the laſt plowing is given, (which is generally in September), about 24 loads of dung from the farm-yard, is alſo laid on the acre. The dung carts uſed in the Carſe of Gowrie, are nearly as large as thoſe uſed in Northamptonſhire.—In the narrow diſtrict of the Carſe of Gowrie alone, which, as has been obſerved, does not contain above 30,000 Engliſh acres, lime, to the value of L. 1800 *per annum*, has been imported for the laſt 7 years;—and has been principally, indeed almoſt wholly, uſed as manure.

In Northamptonſhire, though lime can be procured in almoſt every pariſh, it has hitherto been but partially uſed as a manure.—And whether

ther it is that the experiments which have been made, have not been judiciouſly conducted, or that the farmers, from the want of leaſes, are prevented from expending money in the purchaſe of a manure, from which no immediate return can be expected; certain it is, that there does not appear any great probability of its being ſoon introduced into general uſe, without the united exertion of the landlords.

COMMONS and WASTE LANDS.

NORTHAMPTON-SHIRE.

It is only in thoſe pariſhes in this county which have been incloſed that the lands are held in ſeveralty. The open field townſhips are held both by proprietors and tenants, in the ſame manner as was the practice at the time they were firſt cultivated. And there, what in Scotland is called *run-ridge*, or *run-field*, univerſally prevails. To the preceding report reference is made to an account of the manner in which the commons and woodlands are occupied.

PERTH-SHIRE.

In this county the lands are all held in ſeveralty; and commons, or what was formerly known by the name of *run-ridge* property, is ſcarcely known; even in the rocky and mountainous parts of the country, where the ſurveyor cannot drag his chain, every proprietor knows the bounds of his own eſtate; and where artificial boundaries cannot be fixed, natural ones, ſuch as ſtreams of water, or the ſummits of mountains, are made uſe of to aſcertain the marches.

OBSERVATIONS.

The abolition of *run-ridge* or *run-field*, may be reckoned the firſt dawn of a ſpirit for improvements in Agriculture that appeared in Scotland, and which, added to another excellent plan adopted by the landlords, which has been already taken notice of, *viz*, that of granting leaſes, accounts in a great meaſure for the very great improvements which have lately taken place in that kingdom; and it cannot admit of a doubt, that were the open field pariſhes in Northamptonſhire divided and incloſed, and the commons and woodlands converted into private property, in the manner in which the lands in Perthſhire now are, the moſt ſubſtantial improvements would of courſe be introduced; and the produce of the lands, under ſuch ſuperior cultivation, as would in that event take place, become greatly more abundant.

HARVESTING

HARVESTING THE CROP.

NORTHAMPTON-SHIRE.

In this county the wheat is reaped with ſickles, and the barley, and oats, and beans are mowed with the ſcythe, and after being turned over are put up in coles in the field, like hay, where they ſtand ſome time, and are afterwards carried home, and either put into the barns, or built and thatched in the ſtack-yard.

The wheat is cut very high from the ground, and being bound up in ſheaves, is allowed to remain in ſhocks in the field till it is ready to be houſed; and after that is done, the ſtubble is cut with ſcythes, and carried home to the ſtraw-yard, where it is either uſed for litter, or for thatching houſes.

PERTH-SHIRE.

In this county, and indeed almoſt every where in Scotland, the corns are all cut with ſickles, in the ſame manner as what is done in England. And after having remained ſome time in ſhocks, or what is here called *ſtooks*, it is carried home, and built up, and carefully thatched in the ſtack-yard, from whence it is only carried into the barns to be threſhed.

OBSERVATIONS.

There is no operation of huſbandry in which there is a greater difference than in the manner of harveſting the crops in the different counties, as appears above.—The mode adopted by the Perthſhire farmer no doubt requires more hands to be employed to get an equal number of acres cut down in the ſame ſpace of time.—But whether his getting it done more completely, and all at once, may not in the end put him on a footing with the Northamptonſhire farmer in point of expence, (ſuppoſing the rate of wages and board-wages to be the ſame), appears rather doubtful. Certain it is, that were the Northamptonſhire plan adopted in this county, it would be attended with great riſk, as the climate is ſo much later, by which means, in bad harveſts, the corns are injured by the great falls of rain which ſometimes take place, even notwithſtanding of the great pains which is generally uſed to ſet up the ſhocks in a manner the beſt calculated to defend the grain from injury.—It may be well worth the conſideration of the farmers in both counties, to conſider whether it is not practicable to lay the corn from the ſcythe in ſuch a manner, as that it could be eaſily bound up into ſheaves. Could this be effected, it is probable that the Northamptonſhire farmer would annually ſave a conſiderable

quantity of grain, which is at preſent loſt among the ſtubble, after every exertion that can be uſed in raking the field; and, on the other hand, the Perthſhire farmer would be enabled to accompliſh the work in a ſhorter period, and to as much purpoſe, while he would be relieved from the neceſſity of truſting to people from the remote parts of the country, for cutting down his corns.—Such an invention as this juſt now mentioned has been found out, and is ſaid to be very ſimple in its conſtruction, being nothing more than a piece of pliable wood, formed into a kind of bow, one end fixed on the ſcythe, and the other on the handle.—If it is found to anſwer in practice, it will certainly be an improvement of real utility.—The ſcarcity of hands was probably the firſt cauſe that induced the Engliſh farmer to uſe the ſcythe in cutting down his corns;—and that cauſe has induced ſome farmers in the neighbourhood of Edinburgh to adopt the ſame plan this year.

CONCLUSION.

The preceding comparative account of the two counties might have been extended to a great many other articles, ſuch as *farm-houſes and offices, roads and bridges, implements of huſbandry*, &c. &c. but as no material difference appears in theſe reſpects, it was judged unneceſſary to enter into a minute detail of the particulars in either county. It may appear ſurpriſing to ſome readers, that no account is given of the live ſtock in theſe counties; but without extending that article to a great length, it was found impoſſible to ſtate any thing on the ſubject that would have tended in any great degree to information.—Suffice it therefore to ſay, that in both counties there is yet great room for the active and intelligent farmer to introduce improvements in the breeds of the different ſpecies of ſtock. Such a ſpirit has, however, become pretty general among the farmers in both diſtricts, and which, if aided by the landlords, will no doubt in a few years produce very beneficial conſequences.

It is only neceſſary farther to add, that every endeavour has been uſed in order to execute this commiſſion with candour and impartiality. And the *general deſcription* of the modes of Agriculture and ſituation of the tenants in each county, will, it is hoped on inveſtigation, be found to be conſiſtent with truth.—The time allowed for making the ſurvey of any particular county, is ſuch as to ſubject the ſurveyor to the neceſſity of procuring

procuring much of the neceſſary information from thoſe reſident in the diſtrict, without having it in his power to inquire minutely into the particulars himſelf, and which in this caſe may have been either improperly communicated or not properly underſtood.

If any misſtatement of facts ſhould appear in the preceding account, it is hoped the candid reader will attribute it to the cauſes already mentioned, rather than to any want of attention on the part of the ſurveyor. Any deficiencies that may appear, will no doubt be amply ſupplied by the gentlemen, and intelligent farmers, to whom copies of this Report will be tranſmitted by the Board for their remarks and obſervations.